Towards a cashless society in Thailand and the Philippines during the COVID-19

pandemic: Implications for improving financial and societal well-being

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Abstract

This study determines the e-satisfaction perception of cashless transactions by Filipinos in

Thailand and the Philippines during the COVID-19 pandemic. The variables of interest include

speed, ease, security and trust. Data was collected from a sample of 264 cashless transaction

users using an adopted survey form. The study reveals that millennials and Gen Z are the two

highest users of cashless transactions, while more women than men availed of these transactions.

We recommend sustainable market segmentation and sustainable planning to uphold cashless

transaction users' satisfaction levels. The Philippine and Thailand governments would do well to

initiate cashless transaction literacy programmes, to enable improved financial and social well-

being.

Keywords: cashless transactions, cashless transaction factors, Covid 19, demographic

variables, e-satisfaction

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Introduction

The COVID-19 pandemic has catalyzed a shift in awareness. It provided the necessary push for more consumers – individuals, businesses, and the government – to use digital payments when the country implemented health and social-distancing protocols (Estioko, Mesina, & Masangkay, 2021). In addition, as economic concerns and restrictions continue to affect consumers worldwide, new buying and consumption patterns and behaviors have emerged (Nielsen, 2020); as a result, customers shifted to cashless transactions. In other words, since many shops were closed because of the pandemic, there was a push for e-commerce and mobile payments (Jia, 2020), and other digital funding solutions. Furthermore, with the COVID-19 pandemic setting digitization into hyperdrive, the rise of digital banking technologies across channels and outside the brick and mortar setting has reduced the reliance on (Solis, 2020). Thus, the COVID-19 pandemic has significantly impacted digital transformation, affected consumer behavior, and changed business processes worldwide.

In developing Asia, growth at a CAGR of 30.9% is expected due to sustained digital innovation and the adoption of digital payments for financial inclusion (Research & Market, 2020). The high operation value in digital commerce is driven by many products and services purchased online. It includes all e-Commerce, e-Services, and digital media transactions or bookings in e-Travel. As a result, the entire segment is forecast to rise by almost 40% and hit \$5.8trn by 2025 (Kranjec, 2021).

The Thailand government established the Payment System Roadmap and the National e-Payment System Master Plan in response to the rise of a cashless society. The plan is intended to boost Thailand as a cashless society and to encourage e-payment systems, such as Prompt Pay, Electronic Data Capture EDC, and Quick Respond Code QR Code (Bank of Thailand, 2017). Likewise, the Philippine government recognizes digital payments as a policy priority to enable Filipinos to seize the opportunities of the digital revolution (Better than Cash Alliance, 2019).

Digital payment is now used by Filipinos in almost every online activity, although this sudden surge was the immediate effect of the pandemic and the resultant lockdowns. E-wallet companies

have continuously expanded their features to facilitate customer needs. Bill payments and prepaid top-ups, savings, insurance, and even donations to partner charities were made accessible to most people, requiring only a mobile number and proof of identification for signups. According to BSP data, more Filipinos adopted e-wallet or e-payment systems than credit cards in 2018. Platforms such as GCash and PayMaya allow Filipinos to conduct digital financial transactions without physical cash and credit cards (Zoleta, 2021). Many Filipinos used digital payments to pay for bills (44%) and groceries (36%) as of November 2020; according to the global payments platform PayPal, which is a big jump from 2015 (Hitotin, 2021). The 12 best mobile wallets in the Philippines are PayMaya, Coins.ph, GCash, GrabPay, Moneygment, PayPal, BPI Direct BanKo, Dragonpay, ML Wallet, CLiQQ, ShopeePay, and Lazada Wallet (Raymart, 2021).

There is a lack of satisfactory studies about the adoption factors of cashless transactions which connect customer trust, security, and demographic variables. These factors are important to understand in order to understand the dynamics of the e-payment industry. Moreover, comparative studies are rare in the literature in Thailand and the Philippines. This gap, noted in the literature, was addressed in this study.

Research Problems

This study seeks to answer the following questions: (1) What are the demographic profiles of the respondents in terms of age, gender, income, occupation, marital status, and location?, (2) What is the perception of the respondents from the abovementioned demographic profiles on the use of cashless transaction in terms of speed, ease, security, trust, benefits, and challenges?, (3) Is there a significant relationship between the factors of cashless transactions and e-satisfaction of adopting cashless transactions?, and (4) What service program can be proposed to encourage the use of cashless transactions and the e-satisfaction of users?

Research Objectives

This study determines the significant factors that affect cashless transactions in terms of speed, ease, security, trust, benefits, and challenges; and compares respondents' perceptions based on their profiles, in Thailand and the Philippines.

Significance of the Study

This study is significant to the following: (1) Cashless Transaction Service Providers: it highlights the factors that may affect user experience of cashless transactions; (2) Regulators and Policymakers: the results of this study can be utilized to draft laws, policies, and controls that are fair for both users and service providers; (3) Business-Owners: the results of this study can be used to capitalize on the efficiency that cashless transactions can provide, and thus craft a good image amongst their customers.

Scope and Limitations

The respondents of this study are limited to Filipino cashless transaction users in Thailand and the Philippines. It explores their use of cashless transactions during the COVID-19 pandemic, on the basis of their demographic profiles.

Research Framework

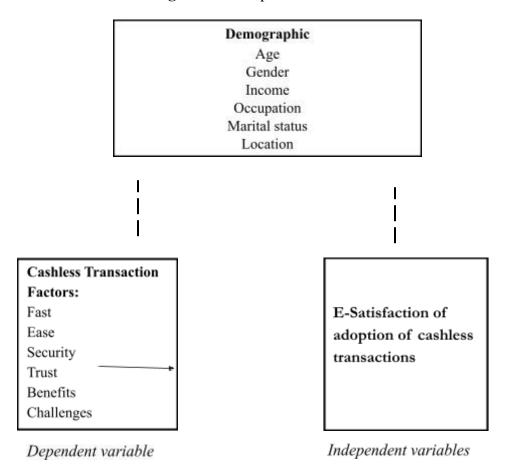
The study has three parts; the first part describes the respondent demographics, such as age, gender, income, occupation, marital status, and location. The second part explores the significant factors which affect cashless transactions such as speed, ease, and security, while the third part discusses the key determinants of e-satisfaction from using cashless transaction platforms, namely, trust, benefits, and challenges. Figure 1 below highlights the three parts of the study.

Hypothesis Development

Preetha, Iswarya and Yuvarani (2018) proved that benefits and challenges significantly influence customer satisfaction. Besides, there is a positive relationship between security and consumer

satisfaction (Sheng, Yeen, Luen, & Peng, 2018). Dandis, Badi, Eid, Robin, and Wierdak, (2021) proved that confidence benefits, unique treatment benefits, and brand credibility had a significant and positive impact on customer satisfaction, whereas Kark (2020) cites cost, usefulness, trust, social influence, credibility, information privacy, and responsiveness as the essentials for improving user satisfaction with mobile payments services. Furthermore, the perceived effect of security has a direct effect on trust, which in turn boosts the popularity of websites and encourages customers to return. This may be a contributing factor for the increased use of cashless payments (Barkhordari, Nourollah, Mashayekhi, Mashayekhi, & Ahangar 2017). E-Satisfaction, therefore, is affected by user trust in cashless transactions. A 2019 study conducted in the Serbia by Vasic, Kilibarda and Kaurin demonstrated that security is significant to customer satisfaction, which corroborates the abovementioned finding. Thus, the researchers formulated the hypothesis: Factors of cashless transactions such as speed, ease, security, trust, benefits, and challenges are significantly related to the e-satisfaction from cashless transactions.

Figure 1: Conceptual Framework



Methodology

Research Design

The study utilizes a descriptive, correlational, and comparative research design to describe the respondent profiles, determine significant factors that influence the use of cashless transactions, and compare significant differences in the use of cashless transactions according to the demographics. The respondents of this study are the individual users of cashless transactions in Thailand and the Philippines.

Population and Sampling

Purposive sampling was primarily employed in this study, wherein the researchers set a particular criterion (users of cashless transactions) for selecting respondents for the study. Convenience and snowball sampling designs was also employed for the easy collection of data. In fact, the snowball effect helped researchers gather data conveniently. G*Power 3.1 was used to calculate the required sample size for this study, with 264 obtained as the computed sample size, with a medium effect size at 95% power $(1-\beta)$ err probability).

The questionnaire employed was adapted using the following dimensions of cashless transactions: Dependent variables: easy, fast (Jain & Jain, 2017); trust (Yang, Mamun, Mohiuddin, Nawi, N. C., & Zainol, 2021), benefits, and challenges (Apau, Darko, & Obeng, 2019); security (Boonsiritomachai & Pitchayadejanant, 2017); and the independent variable esatisfaction (Husain, Asim, Varshney, Bhatnagar, & Satsangi, 2019). This adapted questionnaire underwent validity and reliability testing. Since there were minor modifications in the survey form, pretesting was conducted on 30 respondents. The values of all variables were higher than 0.70; hence, the items in the questionnaire are acceptable.

Data Collection Procedure

The steps used for gathering data for this research are as follows: (1) A permission letter addressed to respondents, explaining the objective and purpose of the study, was drafted; (2) respondents were selected and identified according to the criterion set by the researchers: users of cashless transaction platforms (3) the questionnaire was sent to prospective qualified respondents as a Google form; (4) the responses were checked, and upon reaching the required sample size, the researchers stopped sending out the questionnaire; and (5) lastly, the answers and the data received were analyzed using statistical tools.

Data Analysis

The data collected was analyzed using jamovi. Descriptive statistics were used to analyze the

respondents' demographic variables, including frequency and percentage. In addition, mean rating and standard deviation were used to analyze the respondents' perception of cashless transactions regarding speed, ease, security, trust, benefits, and challenges according to demographics and e-satisfaction. Finally, inferential statistical tools such as multiple linear regression were used for testing the significant relationship between the factors affecting cashless transactions and the e-satisfaction from adopting cashless transactions.

Results and Discussion

Descriptive Statistics

Profile of Respondents

Table 1 shows the demographic profiles of the respondents. The age group with the highest number of cashless transaction users was 25-40 year old millennials (41.3 percent). The Millennials are the group with the highest number of users of cashless transactions because they are dependent on the latest technology. According to Copeland (2020), the Millennials were the first generation to grow up with mobile phones, personal computers, digital video cameras, digital music players, and the web. The more significant part of the respondents was female (161), which accounted for 61 percent. The results indicate a gender gap among cashless transaction users in Thailand and the Philippines, with a 22 percent difference between males and females. Single people accounted for 58.7 percent of the respondents. These results suggest that single people are favourable towards cashless transactions. Furthermore, the annual income of the majority of the respondents (32.2 percent) is below \$5,000. The annual income of the cashless transaction users in Thailand and the Philippines depends on their occupation and varies according to their current location.

Regarding the occupation of respondents, the study showed that the majority of respondents were employed as teachers (42 percent). The results indicate that any occupation can quickly adopt cashless transactions in Thailand and the Philippines, which has become a noticeable trend

amidst the COVID 19 pandemic. The location of this study was both in Thailand and the Philippines.

Table 1: Demographics of Cashless Transaction Users

Factors and Group	N	%
Age		
(Gen Z) 18 – 24 years old	81	30.7%
(Millennials) 25 – 40 years old	109	41.3%
(Gen X) 41 – 56 years old	42	15.9%
(Boomers II) 57 – 66 years old	32	12.1%
Gender		
Female	161	61.0%
Male	103	39.0%
Marital status		
Married	99	37.5%
Single	155	58.7%
Widow	10	3.8%
Income		
<\$5,000	85	32.2%
\$5,001-\$10,000	62	23.5%
\$10,01-\$20,000	75	28.4%
\$20,001-\$35,000	20	7.6%
\$35,001-\$50,000	18	6.8%
>\$50,000	4	1.5%
Occupation		
Accountant/auditor	15	5.7%
Bank Employee	8	3.0%
Entrepreneur	19	7.2%
Government employee	12	4.5%
Laborer	4	1.5%

Retired	21	8.0%
Student	49	18.6%
Teacher	111	42.0%
Location		
Thailand	132	50%
Philippines	132	50%

Table 2 shows the respondent perception and e-satisfaction from the use of cashless transactions. The factor means, ease (4.09), speed (4.03), security (3.64), benefits (4.24), challenges (3.94), and trust (3.82) indicate highly positive responses. These results suggest that cashless transaction users in Thailand and the Philippines are satisfied with their cashless service providers.

Mean Rating

Table 2: Perception and E-Satisfaction on the Use of Cashless Transactions Factors

Factors	Mean	SD	Descriptive Rating
Ease	4.09	0.649	Strongly Agree
Speed	4.03	0.683	Strongly Agree
Security	3.64	0.751	Strongly Agree
Benefits	4.24	0.614	Strongly Agree
Challenges	3.94	0.505	Strongly Agree
Trust	3.82	0.676	Strongly Agree

Source: Authors' own

Table 3 shows the factor means (3.41 - 4.20) for the various cohorts on the basis of demographics employed in the study - age, marital status, occupation, gender, and location are similar. Millennials rated benefits the highest (4.39), while boomers rated security the lowest (3.44). This implies that millennials are more concerned about benefits, whereas boomers are

less concerned about transaction security. In terms of gender, women are most concerned about the benefits (4.27) and the least concerned about security (3.51).

On the other hand, widows rated benefits the highest (4.27) and security the lowest (4.27), which implies that widows are more concerned about the benefits and less concerned about security issues. In terms of occupational cohorts, teachers accorded the highest rating (4.43) to benefits, while accountant / auditors rated security the lowest (3.11); implying that these teachers were more concerned about security than accountants or auditors. The income group of <\$5,000 rated the highest (4.38) on benefits, while the lowest rating (3.11) was by the income group of \$35,000-\$50,000 on trust. This implies that low-earning groups are concerned with benefits, while high-income groups are concerned the most with trust. Finally, users in the Philippines accorded the highest rating (4.31) to benefits, and the lowest (3.51) to security, implying that in the Philippines, more users are concerned with benefits than security.

 Table 3: Demographic-Wise Mean Ratings of the Factors Affecting Cashless Transactions

Age

Variables	Boomers II	Gen X	Gen Z	Millennial	s Mean Ave.	
Ease	•	3.63	4.04	4	4.32	4
Speed	•	3.54	3.99	3.98	4.22	3.93
Security	•	3.44	3.69	3.54	3.76	3.61
Benefits	,	3.48	4.27	4.32	4.39	4.12
Challenges	,	3.57	3.9	3.97	4.04	3.87
Trust	,	3.48	3.8	3.81	3.92	3.76
Mean Ave.		3.52	3.94	3.94	4.11	

Marital Status

Variables	Married	Single	Widow	Mean Ave.
Ease	4.03	4.14	3.98	4.05

Speed	3.96	4.09	3.8	3.95
Security	3.64	3.66	3.43	3.58
Benefits	4.06	4.35	4.27	4.23
Challenges	3.85	4.01	3.76	3.87
Trust	3.72	3.87	4	3.86
Mean Ave.	3.88	4.02	3.87	

Gender

Variables	Female	Male	Mean Ave.
Ease	4.07	4.12	4.02
Speed	4.02	4.04	4.03
Security	3.59	3.72	3.66
Benefits	4.27	4.2	4.23
Challenges	3.95	3.93	3.94
Trust	3.78	3.87	8.83
Mean Ave.	3.95	3.98	

Location

Variables Philippines		Thailand	Mean Ave.
Ease	4.11	4.07	4.09
Speed	4.1	3.96	4.03
Security	3.51	3.78	3.65
Benefits	4.31	4.18	4.25
Challenges	3.98	3.9	3.94
Trust	3.79	3.84	3.82
Mean Ave.	3.97	3.96	

Occupation

X 7	Accountant	Bank	E4	Government	
Variables	auditor	Employee	Entrepreneur	employee	
Ease	3.92	4.34	3.89	4.06	
Speed	3.91	4.04	3.89	3.74	
Security	3.11	3.5	3.37	3.58	
Benefits	4.23	4.33	3.83	4.33	
Challenges	3.9	4.01	3.58	4.01	
Trust	3.54	3.9	3.28	3.88	
Mean Ave.	3.77	4.02	3.64	3.93	
Variables	Lohaman	Dotino d	C4 d o4	Teacher	Mean
Variables	Laborer	Retired	Student	Teacher	Ave.
Ease	3.5	4.88	4.03	4.25	4.11
Speed	3.5	3.41	4.03	4.18	3.83
Security	3.25	3.35	3.53	3.89	3.45
Benefits	3.58	3.42	3.67	4.43	3.98
Challenges	3.83	3.61	4	4.05	3.87
Trust	3.29	3.44	3.85	4.04	3.65
Mean Ave.	3.5	3.69	3.85	4.14	

Annual Income

Variables	bles \$10,00-\$20,000 \$20,001- \$35,000		\$35,000-\$50,000	0
Ease	4.27	4.17	3.46	
Speed	4.13	3.92	3.46	
Security	3.81	3.87	3.31	
Benefits	4.38	4.05	3.29	
Challenges	3.99	3.86	3.39	
Trust	3.94	3.88	3.31	
Mean Ave.	4.09	3.96	3.37	
Variables	\$5,001-\$10,000	<\$5,000	>\$50,000	Mean Ave.
Ease	4.07	4.11	3.19	3.88
Speed	4.02	4.12	3.42	3.85

Security	3.68	3.53	2.83	3.51
Benefits	4.34	4.32	3.46	3.97
Challenges	3.93	4.05	3.71	3.82
Trust	3.75	3.88	3.21	3.05
Mean Ave.	3.97	4	3.3	

Multiple Linear Regression (MLR) Analysis

Assumptions of MLR

The assumptions for MRA were verified to ensure there are no violations. The first assumption is the normality test. The normality test was met based on the Shapiro-Wilk statistics results of 0.971; since it is higher than 0.05, the data is normally distributed. The second assumption is autocorrelation, which is tested using the Durbin Watson test. Values below 2.0 mean positive autocorrelation, and above 2.0 indicates negative autocorrelation. In this study, the DW is 1.82, indicating positive autocorrelation. The third assumption is linearity. It was established that there was no linearity present, and that the data was multivariate. The fourth assumption is homoscedasticity: the variance along the line of the best fit remains similar throughout. Tolerance/VIF values should be less than 10. Lastly, Cook's distance should show no significant outliers, high leverage points, or highly influential points. Since the maximum is not more than one; thus, this assumption was proven.

Hypothesis Testing

This study hypothesizes that the factors of cashless transactions such as speed, ease, security, trust, benefits, and challenges are significantly related to the e-satisfaction from adopting cashless transactions. The hypothesis was tested in Thailand and the Philippines and combined both data.

Thailand

Table 4 shows the model regression model of Thailand; it was found that $R^2 = .623$, indicating that the six predictors explain 62.3 percent of the variance. However, 37.7 percent still remains unexplained, which cannot be described by the independent variables. Table 5 shows the multiple regression ANOVA table where [F (6, 125) = 34.392, p = 0.000 <0.05]. It can be concluded that this model is valid, and that all the independent variables are significant and reliable.

Table 4: Model Regression Summary - Thailand

				Std.		Chang	ge Stati	stics	
Model	R	R	Adjusted R	Error of	R	F			Sig. F
Model	K	Square	Square	the	Square	Change	df1	df2	Change
				Estimate	Change	Change			Change
1	.789ª	0.623	0.605	0.4213	0.623	34.392	6	125	0

a. Predictors: (Constant), Speed, Trust, Challenges, Benefits, Security, Ease

Source: Authors' own

Table 5: Multiple Regressions (ANOVA) Thailand

Model		Sum of Squares	df	Mean Square	F	Sig.
	Regression	36.631	6	6.105	34.392	.000 ^b
1	Residual	22.19	125	0.178		
	Total	58.821	131			

a. Dependent Variable: Satisfaction

b. Predictors: (Constant), Speed, Trust, Challenges, Benefits, Security, Ease

Source: Authors' own

Table 6 shows the coefficient of independent variables that influence e-satisfaction from the adoption of cashless transactions of Thailand. The factors Ease [F (6, 125) = 2.793, p = 0.006 < 0.05]; Benefits [F (6, 125) = 2.325, p = 0.02 < 0.05]; and Trust [F (6, 125) = 6.295, p = 0.00 < 0.05] were significantly related with E-satisfaction. On the other hand, Security [F (6, 125) = 0.05]

0.779, p = 0.438 = ns], Challenges [F (6, 125) = -.324, p = 0.188 =ns]; and Speed [F (6, 125) = 0.213 p = 0.832 = ns] are not significantly related with the outcome variables.

Table 6: Multiple Regressions (Coefficients) Thailand

Model		Unstand Coeffic		Standardized Coefficients	t	Sig.
		В	Std. Error	Beta		
	(Constant)	0.449	0.3		1.497	0.137
	Ease	0.301	0.108	0.289	2.793	0.006
	Security	0.064	0.082	0.071	0.779	0.438
1	Benefits	0.195	0.084	0.189	2.325	0.022
	Challenges	-0.114	0.086	-0.097	-1.324	0.188
	Trust	0.455	0.072	0.443	6.295	0
	Speed	0.021	0.097	0.02	0.213	0.832

Source: Author's own

Philippines

Table 7 shows the regression model for the data collected from the Philippines. It was found that $R^2 = .436$, indicating that the six predictors explain 43.6 percent of the variance. However, as with the data from Thailand, 56.4 percent of the variance remains unexplained, and this cannot be described by the independent variables. An R^2 value between 0.5 and 0.7 is generally considered a moderate effect size (Moore, Notz, & Flinger, 2013). Table 8 shows the multiple regression ANOVA table where [F (6, 125) = 16.109, p = 0.000 < 0.05]. It can be concluded that this model is valid, and all the independent variables are significant and reliable.

Table 7: Model Regression Summary: Philippines

				Std. Error	Change Statistics				
Mod		R	Adjusted	of the	R Square	F			Sig. F
el	R	Square	R Square	Estimate	Change	Change	df1	df2	Change
1	.660ª	.436	.409	.4479	.436	16.109	6	125	.000

a. Predictors: (Constant), Speed, Challenges, Security, Trust, Ease, Benefits

Table 8: Multiple Regressions ANOVA: Philippines

Model		Sum of Squares	df	Mean Square	${f F}$	Sig.
1	Regression	19.394	6	3.232	16.109	.000 ^b
	Residual	25.081	125	.201		
	Total	44.475	131			

a. Dependent Variable: Satisfaction

Source: Authors' own

Table 9 shows the coefficient of independent variables that influence e-satisfaction from the adoption of cashless transactions in the Philippines. The factors Benefits [F(6, 125) = 2.461, p = .015 < 0.05]; Trust [F(6, 125) = 2.993, p = .003 < 0.05]; and Speed [F(6, 125) = 2.427, p = .017 < 0.05] were significantly related with E-satisfaction. On the other hand, Ease [F(6, 125) = .276, p = .783 = ns], Security [F(6, 125) = .611, p = .542 = ns]; and Challenges [F(6, 125) = -.213, p = .831 = ns] not significantly related with the outcome variables.

b. Predictors: (Constant), Speed, Challenges, Security, Trust, Ease, Benefits

Table 9: Multiple Regressions Coefficients: Philippines

Model		Unstandardized Coefficients		Standardized Coefficients		
		В	Std. Error	Beta	t	Sig.
	(Constant)	1.399	.415		3.375	.001
	Ease	.024	.085	.027	.276	.783
	Security	.041	.066	.052	.611	.542
1	Benefits	.257	.104	.251	2.461	.015
	Challenges	021	.097	015	213	.831
	Trust	.228	.076	.274	2.993	.003
	Speed	.179	.074	.216	2.427	.017

Philippines and Thailand

Table 10 shows the combined model regression model for the Philippines and Thailand. It was found that $R^2 = .516$, indicating that the six predictors explain 51.6 percent of the variance. However, 48.4 percent remains unexplained, which cannot be described by the independent variables. Table 11 shows the multiple regression ANOVA table where [F (6, 257) = 45.643, p = 0.000 < 0.05]. It can be concluded that this model is valid, and all the independent variables are significant and reliable.

Table 10: Model Regression Summary: Philippines and Thailand

				Std. Error	Change Statistics				
Mode		R	Adjusted R	of the	R Square	F			Sig. F
1	R	Square	Square	Estimate	Change	Change	df1	df2	Change
1	.718 ^a	.516	.505	.4442	.516	45.643	6	257	.000

a. Predictors: (Constant), Fast, Challenges, Security, Trust, Benefits, Ease

Source: Authors' own

Table 11: Multiple Regressions ANOVA: Philippines and Thailand

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	54.039	6	9.006	45.643	.000 ^b
	Residual	50.712	257	.197		
	Total	104.751	263			

a. Dependent Variable: Satisfaction

Table 9 shows the coefficient of independent variables that influence e-satisfaction from the adoption of cashless transactions in the Philippines and Thailand. The factors Benefits [F (6, 257) = 3.446, p = .001 < 0.05], Trust [F (6, 257) = 3.446, p = .001 < 0.05], and Speed [F (6, 257) = 2.569, p = .011 < 0.05] were significantly related with e-satisfaction. On the other hand, Ease [F (6, 125) = .128, p = .62 = ns], Security [F (6, 257) = .388, p = .699=ns]; and Challenges [F (6, 257) = -.134, p = .894 = ns] are not significantly related with the outcome variables.

Table 9: Multiple Regressions Coefficients - Philippines and Thailand

				Standardized				
		Unstandardized	l Coefficients	Coefficients				
Model		В	Std. Error	Beta	t	Sig.		
1	(Constant)	.836	.245		3.419	.001		
	Ease	.125	.067	.128	1.871	.062		
	Security	.019	.049	.023	.388	.699		
	Benefits	.227	.066	.221	3.446	.001		
	Challenges	009	.064	007	134	.894		
	Trust	.323	.053	.346	6.147	.000		
	Fast	.150	.058	.162	2.569	.011		

b. Predictors: (Constant), Fast, Challenges, Security, Trust, Benefits, Ease

Discussion

The Millennials and Gen Z cohorts are the main users of cashless transactions in this study. The results are supported by Dworkin, Rudi, and Hessel (2018) who state that these generations grew up with the digital revolution; therefore, technology is not a disruption but the norm. Gen Z and Millennials are active technology users and have grown up with technology as a normative component within their environment. There are more female cashless transaction users than males. This implies a gender gap in a cashless society where women prefer cashless transactions than men. Idology Company (2019) prove that women are more likely than men to have used cashless apps. The majority of the cashless transaction users are single. Masood, Asim, and Manzoor (2021), also found a majority of single people in their study about the consumer buying decisions about online purchasing. Annual income varies depending on occupation and relates to money spent in cashless transactions. In this study, teachers and students were the greatest adopters of cashless transactions. Location or geography as a demographic factor is reasonable to explore while comparing customer perspectives. This study compared the satisfaction levels of the users of cashless transactions in Thailand and the Philippines.

The study reveals that respondents from both countries, across the demographic characteristics, such as age, gender, location, occupation, and marital status agreed on the factors leading to esatisfaction with cashless transactions. However, two factors, Trust and Benefits had a lower score in terms of the means. This is an indication that cashless transaction service providers in both countries should improve these two aspects because, according to Tharasuk (2020), customer trust can be an overall attitude about a service provider or a passionate reaction to the dissimilarity between what customers expect and what they receive, with reference to the fulfillment of some need, goal, or desire. Likewise, benefits can motivate cashless transaction service providers to continue the business, leading to customer retention and loyalty—these result in two-fold benefits for both users and providers of cashless transactions.

The highest and lowest mean ratings from each demographic profile are essential in formulating

service marketing strategies to improve the cashless transaction industry. The low mean average ratings from this study can be improved by increasing brand awareness through a qualitative follow-up inquiry that can help determine the concerns of the cashless transaction users, and further segmenting users according to the mean ratings into distinct groups to target specific branding campaigns for their products and services. As a result, brand engagement can be considerably improved with the help of this sustainable, competent market segmentation. The demographics are relevant in the marketing strategy, especially for segmentation: gender (Spasova & Taneva, 2021); marital status (Aggarwal, Malik, Mishra, & Paul, 2021); and income (Blokdyk, 2021).

Based on the results, the users were mostly satisfied at this time of the pandemic - an indication of the increased use of cashless transactions amidst the pandemic in both countries. A study by Wisniewski, Polasik, Kotkowski, and Moro (2021) which surveyed 5,504 respondents from 22 European countries established that consumers favour cashless transactions when they believe that handling cash presents a higher risk of infection. Moreover, the habits they develop during periods of restrictions and lockdowns appear to further diminish their appetite for transacting in cash. The majority of Filipinos used digital payments to pay for bills (44%) and groceries (36%) as of November 2020; according to the global payment platform PayPal, it is a big jump from 2015 (Hitotin, 2021).

This study explored the factors that influence e-satisfaction from cashless transactions in Thailand and the Philippines. The findings reveal that the Thai respondents rated Ease, Benefits, and Trust; the Filipino respondents rated Benefits, Trust, and Speed as the most important factors. The combined ratings for both sets of respondents - the Filipino and the Thai (Benefits, Trust, and Speed). Dissimilar results from both countries signify that the Filipinos in Thailand prefer the ease factors because of the influence of the characteristic traits of the Thai people, such as self-control, simplicity and calm nature (Williams, 2018). In contrast, the Philippine users prefer the Speed factors. The results further indicate that trust is always a factor in both countries. These results are similar to those from a study by Eren (2021). Perceived Trust significantly affects customer satisfaction, in products and services as diverse as chatbot use in a banking application in Turkey, to a lighting product from Philips in Indonesia (Budi, Hidayat, &

Mani, 2021). In addition, Leninkumar (2017) proved that trust affects customer satisfaction, as evidenced in commercial banks in Sri Lanka. The higher level of trust in multinational and multicultural organizations creates productive relationships that generate long-term benefits (Murali, Pugazhendhi, & Muralidharan, 2016). The researchers believe that in the abovementioned studies —, the respondents were cashless transaction users also; thus, the results of this study are relevant.

Conclusions and Recommendations

The demographic characteristics employed in the study, age, gender, marital status, occupation, annual income and locations; and the variable e-satisfaction, and the factors affecting cashless transactions such as ease, speed, security, benefits, challenges, and trust; and most importantly, the significant influence of demographics on e-satisfaction are essential for service providers in making decisions, formulating marketing strategies and policies for improving their services. The study concludes that the similarities and dissimilarities in the demographic characteristics of the users of cashless transactions in Thailand and the Philippines permit the cashless transaction industry to build effective brands by applying marketing strategies, namely, segmentation, targeting, and positioning during the COVID 19 pandemic. Besides, the results provide cashless transaction users, awareness of the benefits and risks concerning privacy issues to avoid fraudulent activities or using these platforms for illegal means.

The satisfaction levels of the cashless transaction users in Thailand and the Philippines was examined. These results will guide policymakers in formulating policies to address the concerns around cashless transactions and encourage Thailand and the Philippines to become cashless. The cashless transaction industry should focus more on the lesser rated factors in the study. However, they should not disregard the significance of the factors with higher satisfaction levels as they are also vital for future provisions and guidelines. Appropriate planning and constant monitoring can aid in formulating effective strategies to improve user satisfaction levels and retain existing and future customers.

The researchers propose the following recommendations from the study outcomes: Business Owners, Managers, and Executives of Cashless Society Industries: (1) Proficient and sustainable market segmentation, (2) Sustainable planning to examine the low satisfaction level. In addition to customer acquisition and retention, sustainable planning can aid in achieving long-term goals by focusing on industry programmes, activities, and partnerships. The Philippine and Thailand Government Regulators and Policymakers: Regulators and policymakers should educate and provide information about adoption drives for cashless transactions amid the COVID 19 pandemic. These drives target the factors examined in this research study, particularly, ease, speed, security, benefits, challenges, and trust; and convey the rules and regulations for cashless transactions in order to reduce the chances of fraudulent activities and / or using these platforms for illegal means. Future Researchers: The results from this study can serve as the basis for further research to better understand the dynamics of cashless societies and the overall satisfaction with cashless transactions. In addition, they can address the limitations of this study on future research endeavors.

In summary, we recommend sustainable market segmentation to uphold the satisfaction levels of cashless transaction users, to promote cashless transaction literacy in order to encourage cashless societies to the Philippine and Thailand policymakers, Future researchers are encouraged to utilize this study to understand the dynamics of cashless societies and industries dynamics better. This can help lead the Thai and Filipino societies to improved financial and social well-being.

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