

RESEARCH ARTICLE

# Know Your Customers: How Generations X and Y Perceive Mobile Payment

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This research aims to find the factors that will influence Generations X and Y consumers to utilize mobile payment in the Philippines. A self-administered questionnaire was sent to 160 respondents from Generation X and 160 respondents from Generation Y. The theory of planned behavior was used as a framework. Attitude towards mobile payment, subjective norms, and perceived behavioral control were used to predict the intention to use mobile payments. The results show that attitude is the most significant predictor of intention to adopt mobile payment from Generations X and Y. This implies that the more favorable the attitude, the more likely they will adopt it. The relationships between perceived usefulness, perceived ease of use, and intention to use mobile payment are significant among Generation X. This suggests that Generation X is likely to adopt mobile payment if it is easy to use and useful. Marketers can create an easy step-by-step guide on how to use mobile payment. On the other hand, trustworthiness and compatibility are significant to Generation Y's intention to use mobile payment. This implies that marketers who want to attract Generation Y should introduce mobile payment as a trusted technology compatible with the Generation Y lifestyle. This study has important implications for marketers of mobile payment who want to attract Generations X and Y.

**Keywords:** mobile payment, Generation X, Generation Y, Theory of Planned Behavior, Structural Equation Modelling

**JEL Classification:** D12

Mobile payment adoption worldwide is increasing. China was reported to be the highest adopter of mobile payment (32.5% penetration rate), followed by India (29.5%), Indonesia (15.9%), the United States of America (8.8%), and France (2.2%; Buchholz, 2019). In the Philippines, the 2017 Financial Inclusion Survey (FIS) of the Central Bank of the Philippines showed

that 15.8 million Filipino adults had bank accounts (Vicente, 2018). According to Vicente (2018), only 1.3% used digital banking. Banks continued to have a higher share (11.5%) in account penetration than non-banks, such as microfinance organizations (8.1%), cooperatives (2.9%), and non-stock savings and loan associations (0.3%; Vicente, 2018).

Despite the low mobile payment adoption in the Philippines, there is an opportunity to use mobile payment because of the high mobile phone usage. A report from Euromonitor International (2017) showed that the number of smartphone users in the country grew by 20%, whereas credit card usage grew by 3%. It was estimated that nine million Filipinos owned credit cards (Euromonitor International, 2017). A Visa consumer payment attitudes (2017) study showed that 65% of Filipinos used mobile payment applications on their smartphones, whereas 41% engaged in mobile payments at least once a week.

In 2011, Globe and Smart (two big telecommunications firms) had approximately 10 million e-money wallets, which had 158 million e-money transactions (GSMA, 2014). Globe introduced mobile money-enabled debit cards linked to clients' mobile money accounts and launched the Globe Charge platform, which transformed mobile phones into POS terminals that accepted debit and credit card payments (Alampay & Bala, 2010). On the other hand, Smart and the Philippine Long Distance Telephone Company launched PayMaya in 2015, which is a mobile payment application allowing subscribers to shop online without a credit card (Alampay & Bala, 2010).

In 2015, the Philippine government announced its plan to transform the Philippines into a "digital payment" society within the next 20 years (Nair, 2016). According to Nair (2016), the initiatives of Smart and Globe have enabled 2/3 of the unbanked mobile subscribers to know about mobile payment.

## Research Problem

The study aims to determine the factors that will influence Generations X and Y consumers to utilize mobile payment in the Philippines. Specifically, the study has the following objectives:

1. What are the factors that will influence the intention to use mobile payments among Generations X and Y?
2. How do marketers encourage Generations X and Y to adopt mobile payment?

## Review of Related Literature

### *Mobile Payment*

Amoroso & Watanabe (2011) defined mobile payment as any form of payment in which a mobile device, such as a mobile phone or any other device capable of connecting to mobile communication networks, is utilized to initiate, authorize, and confirm a commercial transaction. It is also known as "m-payment," "mobile money," "mobile money transfer," and "mobile wallet" (Alampay & Bala, 2010).

Mobile payment has increased in recent years (Nair, 2016). This is due to the growing affluence of Filipinos, rising tourism industry, and increasing popularity of online shopping among young Filipinos (Nair, 2016).

The share of digital payments has grown from 1% in 2013 to 10% in 2018 (Massally et al., 2019). However, according to Vicente (2018), the most significant hurdle in cashless payments in the Philippines is the lack of reliable and secure payment infrastructure. According to Vicente (2018), nearly half of account holders who had access to the internet were undecided on e-payments due to issues such as hacking, personal security breaches, and unsafe access.

### *Generation X and Y and Mobile Adoption*

Generation X are individuals born between 1965 to 1979 (Alsop, 2008). According to Alsop (2018), although millennials are the major adopters of technology, there has also been significant adoption in recent years among Generation X. The research revealed that Generation X, whose collective purchasing power accounts for much of electronic payment in the Philippines, is the new "emerging market" for new payment methods (Jiang, 2018). The survey adds that 7 out of 10 Filipinos prefer card payments over cash payments for safety reasons (Jiang, 2018).

On the other hand, Generation Y are individuals born between 1981 to 1996 (Alsop, 2008). Known as millennials, they are brought up in a technology-filled society (Berraies et al., 2016). Berraies et al. (2016) described Generation Y as mobile lovers, early adopters, and extensive users of technology and mobile services. Nielsen (2016) reported that 4 out of 10 millennials worldwide are likely to transfer and receive money from another individual via mobile. They are also likely to use mobile

applications to make purchases in bars, restaurants, and retail stores.

### ***Theory of Planned Behavior (TPB)***

TPB is a widely used theory in studying the intention and adoption of technology (Ajzen, 1991). It is an extension of the theory of reasoned action, which shows that behavioral intention is influenced by attitudes and subjective norms. The TBP is ided by three variables, namely attitude, subjective norm, and perceived behavioral control. Ajzen (1991) stated that these three variables are antecedents of behavioral intention, such as the adoption of mobile payment. Ajzen (1991) also stressed that the TPB could be extended to include other constructs.

### ***Attitude***

Attitude is defined as a mental state of readiness developed through experience. This exerts a dynamic or directive influence on an individual's response (Ajzen, 1991). Bansal & Gangwal. (2016) showed that attitude correlates positively with behavioral intentions to adopt m-commerce ( $p$ -value  $< 0.001$ ). Koloseni & Mandari (2017) stressed that attitude has a direct and positive influence on adopting mobile payment. A favorable attitude towards mobile money services can, therefore, boost user's intention to use the mobile payment for Generations X and Y. Thus, the following hypotheses are made:

H0a: Generation X will have a positive intention to use mobile payment.

H0b: Generation Y will have a positive intention to use mobile payment.

This study adopts the following as antecedents of attitude in the TBP: Perceived ease of use (PEOU), perceived usefulness (PU), trustworthiness, and compatibility.

PEOU is the degree to which an individual believes that the use of a particular system is free of effort (Aslam et al., 2017). Ramayah et al. (2017) pointed out that attitude towards technology was driven by PEOU. This leads to the following hypothesis:

H1: PEOU positively affects attitude towards intention to use mobile payment.

PU is the probability of enhancing job performance with a particular system (Davis, 1989). Bansal & Gangwal (2016) used the definition of PU as a user's belief that using a particular system will enhance his job performance. PU was found to be the strongest predictor of the attitude towards m-commerce. PU was significant for both Generations X and Y (Yulianita, 2018). This leads to the following hypothesis.

H2: PU positively affects attitude towards mobile payment.

Trustworthiness is defined as the belief that vendors will perform some activity by customers' expectations. The study of Bansal & Gangwal (2016) showed that the effect of trust on attitude is significant ( $p$ -value  $< 0.001$ ). Fischer et al. (2017) concluded that both Generations X and Y evaluate m-payment methods as risky. Both perceive the safety of the system as the most important criterion to use the technology. This leads to the following hypothesis:

H3: Trustworthiness positively affects the attitude towards mobile payment.

Compatibility refers to the degree to which an innovation is perceived as consistent with an individual's values, past experiences, and needs (Aslam et al., 2017). Aslam et al. (2017) showed that compatibility ( $p \leq 0.05$ ) has a positive and significant relationship with consumer attitude towards mobile payment services. Fang & Shih (2003) stressed that while consumers understand the advantages of mobile banking, many have yet to utilize it as it should be compatible with their lifestyles. This leads to the following hypothesis:

H4: Compatibility positively affects attitude towards mobile payment.

### ***Subjective Norms***

Interpersonal influence has been defined as the relationship of one individual to another (Ramayah et al., 2017). Ramayah et al. (2017) concluded that interpersonal influence in subjective norms exhibited a significant positive relationship with the consumers' behavioral intention to use mobile money. This study showed that positive word of mouth from one individual that is considered important by the potential

user was the most persuasive aspect for an individual to use a mobile payment service. This leads to the following hypothesis:

H5: Interpersonal influence positively affects subjective norms involving mobile payment.

Unlike interpersonal influence, which is the relationship of one individual to another, external influence refers to mass media reports, expert opinions, and other non-personal information considered by individuals in performing a behavior (Ramayah et al., 2017; Velarde, 2012). According to Velarde (2012), external influence is perceived social pressure to perform a certain behavior (Ajzen, 1991). The effect of external influence (p-value <0.001) on the subjective norm was positive and significant in mobile commerce adoption (Bansal & Gangwal, 2016). This leads to the following hypothesis:

H6: External influence positively affects the subjective norms of mobile payment.

**Perceived Behavioral Control (PBC)**

Ramayah et al. (2017) stressed that PBC predicted a consumer’s intention to use mobile money. In the information technology literature, it was suggested that PBC would increase behavioral intention to use technology (Gu et al., 2009).

Self-efficacy beliefs are considered as antecedents of PBC in this study because these beliefs have been observed to affect PBC (Fang & Shih, 2003). The study of Bansal & Gangwal (2016) showed that self-efficacy beliefs or the self-confidence to perform a behavior affected PBC positively. Fang & Shih (2003) found that self-efficacy was a significant determinant of PBC. & Todd (1995) found that self-efficacy predicted the intention to use a wide range of technologically advanced products such as cellular phones for mobile payments. This leads to the following hypothesis:

H7: Control beliefs on self-efficacy positively contributes to perceived behavioral control of adopting m-payment.

The preceding discussions have led us to the following hypotheses:

H8: There is a positive relationship between attitude and intention to adopt mobile payment.

H9: There is a positive relationship between subjective norms and intention to adopt mobile payment.

H10: There is a positive relationship between PBC and intention to adopt mobile payment.

**Conceptual Framework**

Figure 1 shows the study’s conceptual model.

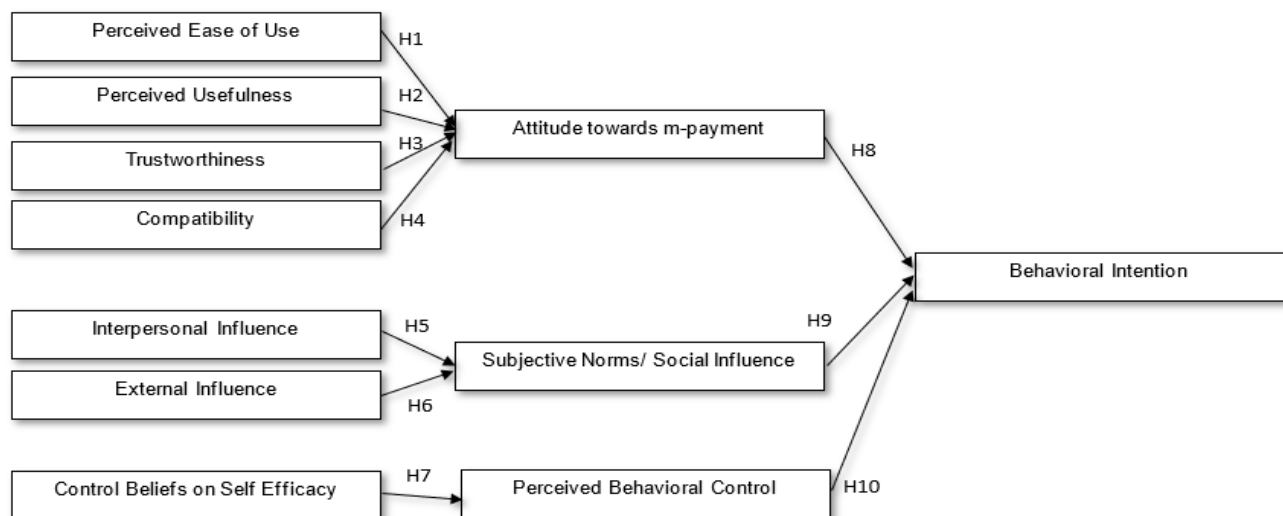


Figure 1. Conceptual Framework

## Methodology

A self-administered online survey questionnaire was used to gather data from 320 respondents. Of the 320 respondents, 160 were from Generation X, whereas 160 were from Generation Y. Of the 320 respondents, 160 were users of mobile payment, whereas the remaining 160 were non-users. The questionnaire was divided into two sections. The first section collected basic information on the respondents, such as demographics. The second section measured the constructs using a seven-point Likert scale, where (1) is *strongly disagree* and (7) *strongly agree*. In assessing the impact of each variable on behavioral intention, partial least square–structural equation modeling (PLS-SEM) was utilized through Smart PLS software.

## Results

The research initially gathered 382 respondents. By filtering the data to the desired respondent age and the familiarity with GCash or PayMaya, the data set was trimmed down to 320 respondents (Table 1).

**Table 1.** Summary of Respondents

Gender	User	Non-User	Sub-Total
<i>Generation X: 38 up to 53 years old</i>			
Male	40	40	80
Female	40	40	80
<i>Generation Y: 22 up to 37 years old</i>			
Male	40	40	80
Female	40	40	80
Total	160	160	320

Of the Generation X respondents, 97% had active bank accounts, whereas 59% had active credit cards. All are familiar with mobile payment platforms, but only 53% are familiar with both GCash and PayMaya.

Of the Generation Y respondents, 93% had active bank accounts, whereas 51% had active credit cards. All are familiar with mobile payment platforms, but only 69% are familiar with both GCash and PayMaya.

Internal consistency and reliability of the constructs for Generation X are all satisfactory, with values of 0.70 and above. Composite reliability, where the minimum acceptance level is 0.60, also has satisfactory values of 0.80 and above. For average variance extracted (AVE), all constructs are also satisfactory, as shown in Table 2.

**Table 2.** Cronbach Alpha, Composite Reliability and AVE: Generation X

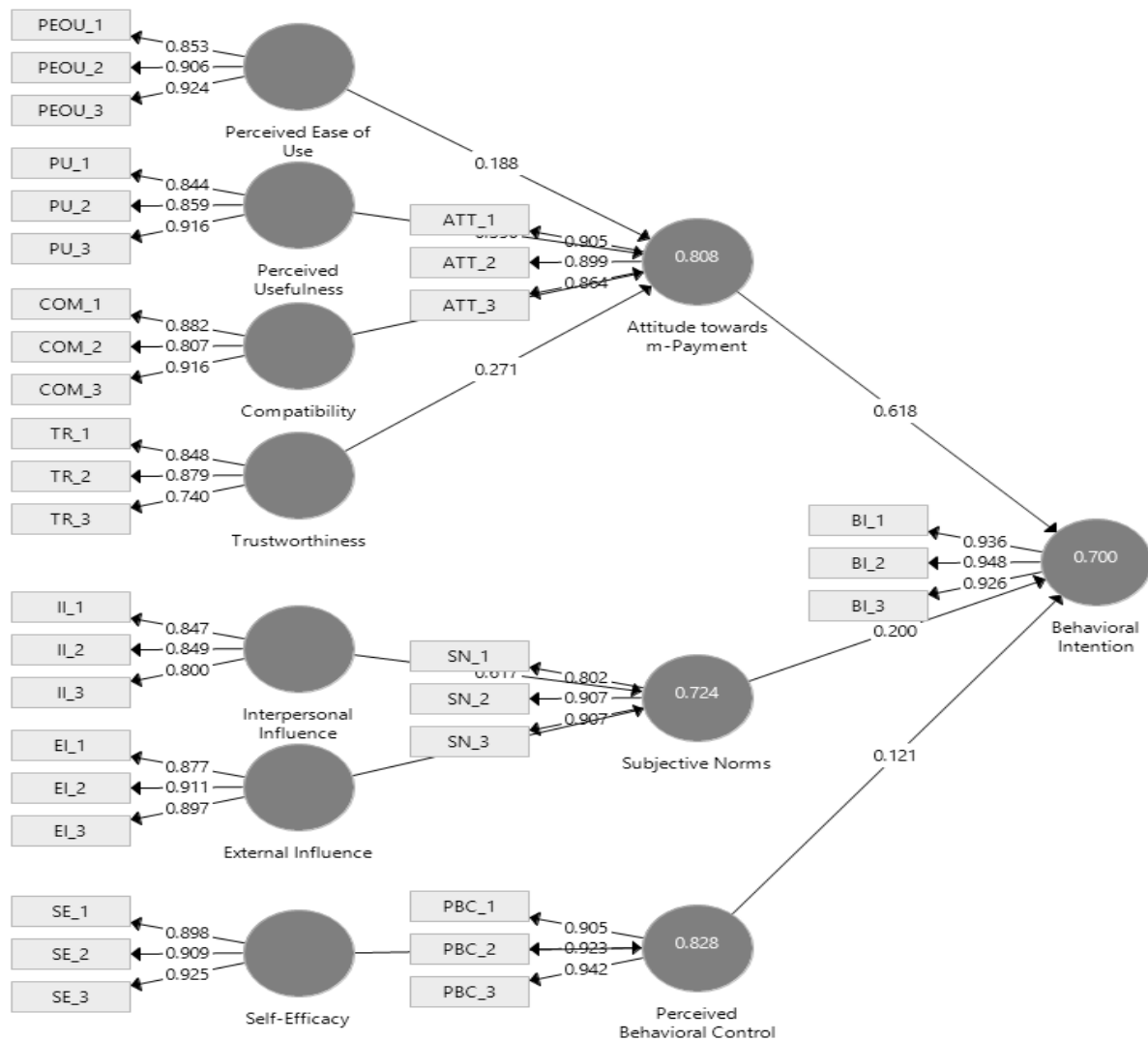
Variables	Cronbach's Alpha	Composite Reliability	Average Variance Extracted (AVE)
Attitude Towards m-Payment	0.868	0.919	0.791
Behavioral Intention	0.930	0.955	0.877
Compatibility	0.838	0.903	0.756
External Influence	0.876	0.924	0.801
Interpersonal Influence	0.779	0.871	0.693
Perceived Behavioral Control	0.914	0.946	0.853
Perceived Ease of Use	0.876	0.923	0.801
Perceived Usefulness	0.844	0.906	0.763
Self-Efficacy	0.897	0.936	0.829
Subjective Norms	0.844	0.906	0.763
Trustworthiness	0.761	0.864	0.680

Table 3 shows the path coefficients that are indicated through p-values. Results show that for Generation X, attitude towards mobile payment, external influence, interpersonal influence, perceived ease of use, perceived usefulness, self-efficacy, subjective norms, and trustworthiness are all highly significant. Meanwhile, there is no significant effect between perceived behavioral control to behavioral intention. Figure 2 shows the path coefficients for Generation X.

Rungtusanatham et al. (2014) recommended two approaches for theorizing mediation effect: (a) segmentation and (b) transmittal. For this research, the transmittal approach was employed. The transmittal approach focuses mainly on indirect effects. In a transmittal approach, researchers should “develop the hypothesis that M mediates the effect of X on Y, or that X has an indirect effect on Y through M, without needing to articulate hypotheses relating X to M and M to Y” (Ramayah et al., 2018, p. 106).

**Table 3.** Direct Path Coefficients: Generation X

Hypotheses	Variables	T Statistics	P Values	Results
H1	Perceived Ease of Use -> Attitude Towards m-Payment	2.433	0.015	Supported
H2	Perceived Usefulness -> Attitude Towards m-Payment	3.879	0.000	Supported
H3	Trustworthiness -> Attitude Towards m-Payment	3.250	0.002	Supported
H4	Compatibility -> Attitude Towards m-Payment	2.405	0.017	Supported
H5	Interpersonal Influence -> Subjective Norms	9.989	0.000	Supported
H6	External Influence -> Subjective Norms	3.867	0.000	Supported
H7	Self-Efficacy -> Perceived Behavioral Control	43.560	0.000	Supported
H8	Attitude Towards m-Payment -> Behavioral Intention	7.450	0.000	Supported
H9	Subjective Norms -> Behavioral Intention	2.963	0.003	Supported
H10	Perceived Behavioral Control -> Behavioral Intention	1.342	0.188	Not Supported



**Figure 2.** Summary of Results for Generation X



**Table 4.** *Indirect Path Coefficients: Generation X*

<b>Indirect Paths</b>	<b>Original Sample</b>	<b>T Statistics</b>	<b>P Values</b>
Perceived Ease of Use -> Attitude Towards m-Payment -> Intention	0.116	2.611	<b>0.009</b>
Perceived Usefulness -> Attitude Towards m-Payment -> Intention	0.216	3.505	<b>0.000</b>
Trustworthiness -> Attitude Towards m-Payment -> Intention	0.168	2.919	<b>0.004</b>
Compatibility -> Attitude Towards m-Payment -> Intention	0.113	1.770	<b>0.077</b>
Interpersonal Influence -> Subjective Norm -> Intention	0.124	2.890	<b>0.004</b>
External Influence -> Subjective Norm -> Intention	0.059	2.069	<b>0.039</b>
Self-Efficacy -> Perceived Behavioral Control -> Intention	0.110	1.368	<b>0.171</b>

For Generation X, all indirect effects are significant except the paths from (a) compatibility to intention via attitude towards m-payment and (b) self-efficacy to intention via perceived behavioral control (see Table 4). This suggests Generation X's willingness to learn something new and adapt to new technology such as mobile payment. In Fang & Shih (2003), self-efficacy was also not significant as a predictor of perceived behavioral control and, consequently, the intention to adopt mobile payment.

#### ***Attitude>Gender>Intention***

Table 5 shows that for Generation Y, internal consistency and reliability of the constructs were also measured. Cronbach's alpha posted satisfactory values of 0.70 and above. Composite reliability also has values above the minimum acceptance level of 0.60. For average variance extracted (AVE), all registered values

are higher than 0.50, which imply that all constructs are also satisfactory.

Figure 3 shows the representation of the summary of the path analysis for generation Y.

Table 6 (for Generation Y) shows that attitude towards m-payment, compatibility, external influence, interpersonal influence, perceived usefulness, self-efficacy, subjective norms, and trustworthiness demonstrated high significance. Perceived behavioral control to behavioral intention is significant, but perceived ease of use is not significant

Data for Generation X and Y were analyzed separately, allowing the evaluation of each variable; however, for multi-group analysis (MGA) using Smart PLS, the data sets were combined. MGA tests if the pre-determined data groups have significant differences in their group-specific parameter estimates (Keller, 2012.). Initially, construct reliability and validity were

**Table 5.** *Cronbach Alpha, Composite Reliability, and AVE: Generation Y*

<b>Variables</b>	<b>Cronbach's Alpha</b>	<b>Composite Reliability</b>	<b>Average Variance Extracted (AVE)</b>
Attitude Towards m-Payment	0.876	0.924	0.802
Behavioral Intention	0.907	0.942	0.844
Compatibility	0.828	0.897	0.744
External Influence	0.869	0.920	0.793
Interpersonal Influence	0.762	0.862	0.677
Perceived Behavioral Control	0.869	0.920	0.793
Perceived Ease of Use	0.837	0.902	0.754
Perceived Usefulness	0.854	0.911	0.774
Self-Efficacy	0.814	0.889	0.728
Subjective Norm	0.760	0.862	0.677
Trustworthiness	0.794	0.880	0.711

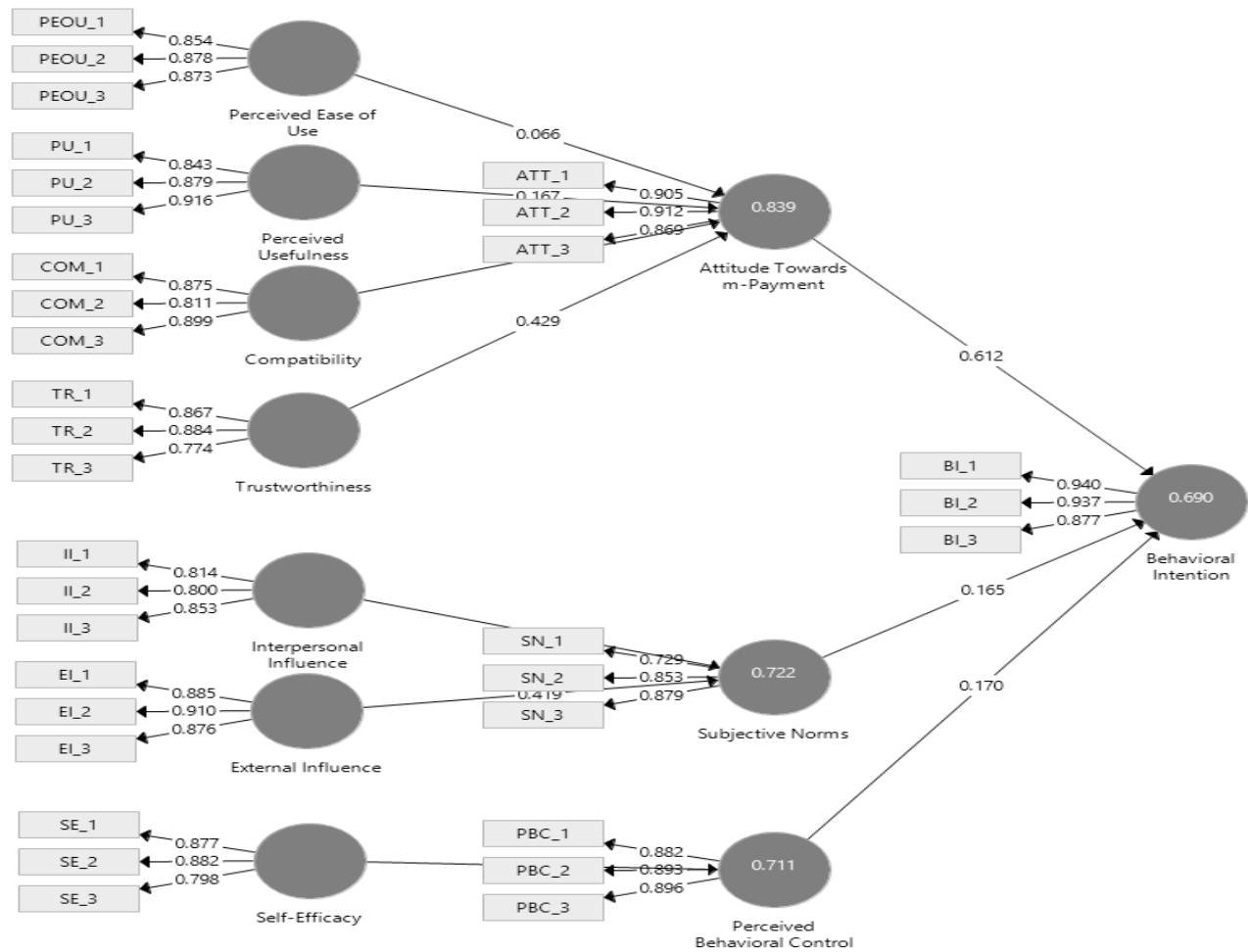


Figure 3. Summary of Results for Generation Y

Table 6. Direct Path Coefficients: Generation Y

Hypotheses	Variables	T Statistics	P Values	Results
H1	Perceived Ease of Use -> Attitude Towards m-Payment	0.873	0.383	Not Supported
H2	Perceived Usefulness -> Attitude Towards m-Payment	2.020	0.044	Supported
H3	Trustworthiness -> Attitude Towards m-Payment	7.350	0.000	Supported
H4	Compatibility -> Attitude Towards m-Payment	4.513	0.000	Supported
H5	Interpersonal Influence -> Subjective Norm	9.212	0.000	Supported
H6	External Influence -> Subjective Norm	6.855	0.000	Supported
H7	Self-Efficacy -> Perceived Behavioral Control	31.204	0.000	Supported
H8	Attitude Towards m-Payment -> Behavioral Intention	7.551	0.000	Supported
H9	Subjective Norm -> Behavioral Intention	3.341	0.001	Supported
H10	Perceived Behavioral Control -> Behavioral Intention	2.050	0.041	Supported

tested through Cronbach’s alpha, composite reliability, and average variance extracted (AVE); values are all satisfactory. Parametric tests show no significant

difference between Generation X and Y among all variables except for self-efficacy leading to perceived behavioral controls, as seen in Table 6.



**Table 7.** *Indirect Path Coefficients: Generation Y*

<b>Indirect Paths</b>	<b>Original Sample</b>	<b>T Statistics</b>	<b>P Values</b>
Perceived Ease of Use -> Attitude Towards m-Payment -> Intention	0.041	0.884	<b>0.377</b>
Perceived Usefulness -> Attitude Towards m-Payment -> Intention	0.102	2.139	<b>0.033</b>
Trustworthiness -> Attitude Towards m-Payment -> Intention	0.262	4.967	<b>0.000</b>
Compatibility -> Attitude Towards m-Payment -> Intention	0.223	4.270	<b>0.000</b>
Interpersonal Influence -> Subjective Norm -> Intention	0.069	2.783	<b>0.005</b>
External Influence -> Subjective Norm -> Intention	0.083	3.179	<b>0.001</b>
Self-Efficacy -> Perceived Behavioral Control -> Intention	0.144	1.972	<b>0.049</b>

On the other hand, for Generation Y, all indirect paths are significant except perceived ease of use to intention via attitude towards payment (see Table 7).

As previously mentioned, the transmittal approach in analyzing mediation was used in this study. Thus, indirect paths are the focus of the analyses. The main reason for PLS-SEM's attractiveness is that the method allows researchers to estimate complex models with many constructs and indicator variables, especially when the prediction is the goal of the analysis. Further, PLS-SEM generally allows for much flexibility in terms of data requirements and the specification of relationships between constructs and indicator variables (Sarstedt et al., 2017).

Given the nature of this research, which contains multiple indicators and variables, PLS-SEM is the appropriate technique to test the relationships. A multi-group parametric test was conducted to compare the relative strengths of the direct and indirect paths between generations X and Y. According to the results, all the direct paths between generations X and Y are not statistically different from each other except for the path going to self-efficacy and perceived behavioral control, with generation X having the higher value. This suggests that Generation X is more self-sufficient compared to Generation Y.

## Discussion

### *Generation X*

For Generation X, H1 to H9 were supported. Only H10 was not supported. This implies that perceived ease of use, perceived usefulness, trustworthiness, and compatibility proved significant to attitude towards mobile payment. The results that showed that attitude towards m-payment is a predictor of intention to use mobile payment is consistent with the studies

of Bansal & Gangwal (2016) and Ramayah et al. (2017). Among the predictors of intention, attitude is the strongest motivator. This is consistent with the findings of Aboelmaged et al. (2013) and Ang et al., (2017). Likewise, interpersonal and external influences were significant to subjective norms. This is similar to the results of Ramayah et al. (2017) and Bansal & Gangwal (2016).

Self-efficacy was also significant to perceived behavioral control. Attitude and subjective norms were significant to intention to use mobile payments, whereas perceived behavioral control was not significant. This is consistent with the findings of Bansal and Gangwal (2016), Ramayah et al. (2017), Fischer et al. (2017), and Yulianita (2018). This implies that Generation X will have a higher intention to use mobile payment if it is easy and useful. Trustworthiness is also highly significant, which is consistent with the findings of Bansal & Gangwal (2016) and Koloseni & Mandari (2017). This suggests that Generation Xers need to trust technology before they will adopt it.

Subjective norms and their variables are also highly significant. The subjective norm is the second most important determinant of intention to use mobile payment. However, the results are inconsistent with Fang & Shih (2003). External influence and internal influence are highly significant, considering how both Globe and Smart have been aggressive in promoting and incentivizing their users through rebates, cash backs, and rewards.

Self-efficacy is also highly significant, which supports existing literature (Bansal & Gangwal, 2016). This suggests that Generation Xers are adaptable (Karr, 2017; Sanflippo, 2017).

Compatibility is significant to attitude towards intention to use mobile payment. These results are consistent with the study of Aslam et al. (2017) but

inconsistent with the study of Fang & Shih (2003). Generation X might not have been born with the digital lifestyle, but they are adaptable (Karr, 2017). The propensity of Generation Xers to use online payment has been derived from their experience as they have witnessed the entire revolution of internet marketing and have been adapting to this digital technology ever since (Karr, 2017). Generation Xers had not been laggards when adopting a new payment technology (Karr, 2017). Perceived behavioral control as an antecedent to behavioral intention is not significant. This is consistent with the study of Aboelmaged & Gebba (2013) but not with Bansal & Gangwal (2016) and Ramayah et al. (2017).

The results showed that external influence is highly significant, and tapping influencers of the same generation will allow Generation Xers to shorten the learning curve or make them more confident that they can act well after the first of several attempts.

### ***Generation Y***

For Generation Y, all variables are highly significant except for perceived ease of use. This is consistent with the results of Bakar et al. (2017), Cobanoglu et al. (2015), and Dastan & Gurler (2016). Similarly, for Generation Y, the least indicator is also perceived behavioral control. The biggest motivator for Generation Y, just like Generation X, is also the attitude towards mobile payment adoption, specifically on compatibility and trustworthiness. Because Generation Y has a plethora of options involving technology, how well it fits with their lifestyle is a consideration. In terms of trustworthiness, Generation Y has also seen how at the start of e-commerce, trust has been an issue. Likewise, trust is also critical and must be positively built because they are well aware of fraud, phishing, and other scheming possible online.

### ***Generations X and Y***

Using multi-group analysis for Generations X and Y, only self-efficacy leading to perceived behavioral controls has a significant difference. However, attitude, compatibility, subjective norm, perceived ease of use, perceived usefulness, perceived behavioral control, and trustworthiness do not have a significant difference between the groups.

When it comes to technological adoption, Generation Y is considered the first-movers and mobile-lovers. Berraies et al. (2016) asserted that Generation X is also

a heavy adopter of new technology. Generation X, who is at the full age of 38 to 53, is still in the workforce where technology is dealt with daily.

During the data gathering, it was relatively harder to find Generation X who used mobile payments. In contrast, it was fairly easy to find Generation Y users of mobile payments. Given this experience, coupled with this study's findings, it is recommended that the financial technology companies prepare marketing strategies to engage Generation X users to use mobile payments more often. As Visa (2016) has stressed, Generation X is considered an emerging market.

For Generation X, perceived ease of use and perceived usefulness are important. Although intuitive user experience is important, for Generation X, a further step must be taken. The study suggests an easy-to-understand, step-by-step guide on using the technology while highlighting its usefulness and benefits.

For Generation Y, convincing them to adapt to a certain technology will not be difficult. Apart from ensuring safety nets of using the technology, we also recommend treating this generation as advanced users. As such, new features can be piloted to them, and they can be encouraged to use it more as part of their lifestyle.

To get additional insights on the adoption of mobile payments, we examined if gender could moderate the relationships between attitude, subjective norms, and perceived behavioral control and intention to adopt mobile payments for Generations X and Y. The results show that gender did not moderate the relationships between attitude, subjective norms and perceived behavioral control and intention to adopt mobile payments for Generation Y. Likewise, gender did not moderate the relationship between subjective norms and intention to adopt mobile payments for Generation X. However, gender moderated the relationship between attitude and intention to adopt mobile payments ( $p$ -value = .025) and perceived behavioral control and intention to adopt mobile payments ( $p$ -value = .044) for Generation X.

This suggests that there are no significant differences between males and females who belong to Generation Y in adopting mobile payments. Both males and females are more technologically savvy, and their comfort level with mobile wallets is higher than their older counterparts (Chawla & Joshi, 2020). In contrast to Generation Y, gender moderated the

relationships between attitude and intention to adopt mobile payments and perceived behavioral control and intention to adopt mobile payments. This implies that there are gendered differences in adopting mobile payments among Generation Xers. According to Shao et al. (2019), males are likely to use mobile payments if it can be accessed anywhere and anytime, whereas females are likely to adopt mobile payments if it is secure and customized.

## Conclusion

This research contributes to an understanding of the differences between Generations X and Y in their intention to use mobile payments. The results show that marketers must have different strategies to attract Generations X and Y to use mobile payments. Even if Generation X has not been born into a digital society, unlike Generation Y, Generation X is willing to adapt to the use of mobile payments and adjust to technology (Berraies et al., 2016). They experience the use of new technology through their jobs.

Although Generation X may need an easy-to-understand step-by-step guide in using mobile payments, Generation Y does not need this. As digital natives, ease of use is not significant to Generation Y.

The technology acceptance model has always been a popular choice for technology adoption. This study proves that the TPB, just like the technology acceptance model, can also be used to predict the intention to use mobile payments.

## Limitations and Areas for Future Study

Future researchers can bring more depth to the study by opening the scale to nationwide respondents as this study is focused mainly on Metro Manila and nearby cities. It will be insightful to see the contrast in adopting technology between Generation X and Y in the provinces versus in the cities. The initial disparity might be internet connection issues, bank branches concentrated in cities, and even low benefit familiarity. It is also good to understand data and insights of the unbanked and if they are employing mobile payments as an alternative. In this study, most of the respondents are banked—a factor that might be associated with respondents in the workforce and living in cities.

This study surveyed the respondents before COVID-19, which occurred in December 2019. Due to

quarantine protocols of staying at home, the perceptions towards mobile payment may have changed during the COVID-19 pandemic. Thus, a survey of respondents during COVID-19 may yield interesting results.

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