International Journal of Social Sciences, Commerce & Management Studies (IJSSCM)
An International Open Access, Peer-Reviewed Refereed Journal
Website: https://ijsscm.com/

Consumer Adoption of Digital Payment Systems in the UAE: A Study of Customer Behaviour

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Abstract
The Central Bank of the UAE's Emirates Digital Government Strategy and Financial Infrastructure Transformation Programme are driving positive growth in the UAE's volume of cashless transactions, which is one of the more ambitious regions of the GCC. Despite the diversity of mobile phone wallets, contactless cards, QR codes and real-time transfer rails such as Aani, the penetration rates are different across different consumer segments and cash is still the preferred payment method for most consumers for everyday retail transactions. The constructs of the Unified Theory of Acceptance and Use of Technology (UTAUT2) for behavioural determinants of consumer adoption of digital payment systems in the UAE are utilised, alongside constructs of trust and perceived security specific to the payment context. Data was collected using a five-point Likert structured questionnaire and the purposive sampling technique was used to select 160 respondents in Dubai, Abu Dhabi and Sharjah. Descriptive statistics, Cronbach's alpha reliability testing, Pearson correlation, independent samples t-test, one-way ANOVA and multiple linear regression were used in SPSS version 26 to analyse the data. In the reliability analysis, all the alpha coefficients showed high internal consistency ranging from 0.782 to 0.891 in all constructs. The regression results indicate that the perceived usefulness, ease of use, security and social influence explain 61.4 per cent of the variance in the adoption intention, with perceived security being the most significant predictor. When the other variables were introduced the facilitating effect was more indirect and non significant. The ANOVA results showed that there were significant differences in adoption across the age groups, while the t-test results did not show any significant gender difference. The paper concludes that in the UAE, the challenge for digital payments is not the technology, but the steps of trust building and security assurance; and offers implications for banks, fintech operators and regulators.

Keywords: digital payments, consumer behaviour, UAE, UTAUT2, perceived security, fintech adoption, mobile wallets

1. Introduction

1.1 Background of the Study

Digital payment systems consist of the different types of digital tools, platforms and infrastructure that allow money to be moved from one party to another, without actually touching it. This includes debit and credit card payments, contactless near field communication payments, mobile wallets, quick response code systems, internet banking transfers and buy-now-pay-later options, and now even account-to-account instant payments rails. In the last 10 years the world's payments system has experienced a structural transformation that has been accelerated by the COVID-19 pandemic,

with many consumers that were previously cash-based moving to a new, faster behavioural journey.

The United Arab Emirates are in a special position in this transformation. The high rate of smartphone penetration, high diversity of expatriates from South-Asia, the Arab world, Europe and East-Asia, and the young median age, combined with a government that has clearly adopted digital transformation as a policy objective, make this a unique place in which to work. The UAE Vision, the UAE's plan to go cashless and the Central Bank's Financial Infrastructure Transformation Programme (FIT) have established a domestic card scheme, an instant payments platform and a regulatory sandbox for fintech experimentation in the UAE. Therefore, the supply-side of digital payments is fairly mature in the UAE. Knowledge about the point-of-sale decisions of an actual consumer, i.e., behavioural, psychological and social aspects of the choice between a digital instrument and cash, is very limited.

Note that distinction between availability and adoption as infrastructure investments don't necessarily lead to the use of it. The consumer can carry a contactless card and pay for goods with the same mobile wallet app, or get cash to buy food in the market or pay for taxi rides or other transactions in the old souks. Taking a purely technological view won't do to understand this why.

1.2 Statement of the Problem

While the UAE has made great progress in the digital payment space, empirical evidence shows that cash remains an important payment method in certain segments of the lower value purchases and informal markets and among certain demographics, such as older citizens and lower income migrant workers. This is a policy and managerial problem: banks and fintech firms have invested resources in developing platforms which require the users to be using them – whereas the regulators wish to make the future cashless, and users are not using them.

In addition, the majority of existing literature on the adoption of payments has focused on Western or Eastern cultures and cultural attitudes towards money are different in the Gulf region. One of the UAE's key characteristics is its population composition, with a minority of nationals and residents from across the globe each having different financial structures, and different habits of prior payment. Empirical evidence, specific to the Emirati context, which is empirical in nature is thus required to establish which of the determinants will have a more dominant role in the context of behaviour or whether there is systematic variation in the behavioural determinants across the different demographic groups.

1.3 Objectives of the Study

This study can be broken down into 5 specific objectives. The first is identifying the key factors that influence consumers' adoption of digital payment systems in UAE. Secondly, to test the relative strength of the perceived usefulness, perceived ease of use, perceived security, social influence and facilitating conditions to predict intention to adopt. Thirdly, to compare the intention to adopt in the different age and gender groups. Fourthly, to evaluate the validity and reliability of the instruments of the measurement in the context of UAE. Finally, to offer actionable advice to banks, fintech firms and policymakers looking to further a transition to cashless payments.

1.4 Research Questions and Hypotheses

In the study, there are four research questions answered. Which of the following is the most critical element in UAE consumers' usage of electronic payment systems? Is there a higher level of security than functional (useful, easy to use)? Are there any moderating effects of demographic characteristics on adoption behaviour? How similar is the explanation of variance of the selected constructs in predicting intention to adopt?

Arising from these questions, the following hypotheses were formulated:

H1: Perceived usefulness has a significant positive effect on consumer adoption of digital payment systems.

H2: Perceived ease of use has a significant positive effect on consumer adoption of digital payment systems.

H3: Perceived security has a significant positive effect on consumer adoption of digital payment systems.

H4: Social influence has a significant positive effect on consumer adoption of digital payment systems.

H5: Facilitating conditions have a significant positive effect on consumer adoption of digital payment systems.

H6: Adoption intention differs significantly across gender groups.

H7: Adoption intention differs significantly across age groups.

1.5 Significance and Scope of the Study

The results from this research has implications for three constituencies. Once the dominant behavioural drivers have been identified it is possible to spend commercial banks' and fintech operators' marketing and product development funds in an optimised way, and in places where security is the limiting factor, it makes sense to spend more on a better, more robust security solution than on incremental improvements to the interface. The findings are relevant to regulators, as they help them make informed decisions on the design of the consumer protection framework and financial literacy interventions. The study is a contribution to technology acceptance theory, which is seldom discussed in the literature of technology adoption in the Gulf region, in the context of demographic diversity.

It is a small-scale investigation and has focused on the individual consumers in three of the most populous emirates (Dubai, Abu Dhabi and Sharjah) aged 18 years and older. This investigation excludes the adoption of the Merchant side, the cross-border remittance behaviour as well as corporate treasury payments. The data is cross sectional (collected at one time only) and the number of respondents (160) limits the generalisability of the data to the wider national population.

2. Literature Review

2.1 Theoretical Foundations of Technology Adoption

The theoretical bases of the studies on payment adoption can be largely traced back to the framework of the Technology Acceptance Model and its derivations. The initial model suggested that attitude toward technology were influenced by perceived usefulness and perceived ease of

use, which in turn influenced behavioural intention leading to technology use. This cost-effective design has proven itself to withstand the test of time, but it was too small a scale to take into account other factors, namely social and environmental.

Theories were combined in one theory, the Unified Theory of Acceptance and Use of Technology (and especially the revision for consumers, UTAUT2), which integrated many of the theories, such as performance expectancy, effort expectancy, social influence, facilitating conditions, hedonic motivation and price value and habit. In a systematic review of the UTAUT2 applications, Tamilmani, Rana and Dwivedi (2021) found that the significant factors were always performance expectancy and habit, whereas facilitating conditions was a factor that appeared to have very different impacts in the various contexts. Later, Venkatesh (2022) revisited the development of the framework, and also proposed that the constructs of risk and trust are missing in the original formulation, and should be incorporated into the financial technologies context.

Migliore, Wagner, Cechella and Liébana-Cabanillas (2022) conducted a cross-cultural study to test the extended UTAUT2 in explaining the adoption of mobile payment, where they found that cultural dimension was a mediator between the strength of social influence, with the former dimension having stronger effects in collectivist societies. In Jordan, mobile banking adoption was studied by Alalwan et al. (2017) and they found that perceived risk moderated the relationship between performance expectancy and the intent to adopt mobile banking, further stressing the need of an explicit treatment of perceived risk in modelling the adoption of financial technology. Overall, this theory suggests that a theory of payment adoption should be functional constructs of the classical models and should be extended to include security and trust as substantive predictors in the model (not peripheral controls).

2.2 Determinants of Digital Payment Adoption

Empirical research has identified a consistent set of determinants—significance of the determinants varies from context to context. Perceived usefulness, which is defined as the belief that a payment instrument saves time, reduces the burden of cash and facilitates record keeping, is always a significant issue in payment contexts. Singh et al. (2020) did a study of Indian consumers and came up with a result that the variable with the highest impact on consumers' intention to use mobile wallets was perceived usefulness, followed by satisfaction as a partial mediator between perceived usefulness and intention to use mobile wallets. The construct "perceived ease of use" remains valid but seems to be becoming more and more diminished as the smartphone interface becomes more sophisticated, and as consumers acquire greater overall smartphone skills. Effort expectancy was not significant for the first time adopters and statistically weak for the experienced users, suggesting that prior knowledge has a moderating effect between the effort expectancy and the adoption of any product/service.The results showed that effort expectancy was significant for first time adopters and weak and insignificant for experienced users, suggesting that the relationship between effort expectancy and the product/service adoption was moderated by the prior product/service use.

The perceived security and trust is at the heart of payments literature—due to the fact that money is the subject of the transaction. The mobile wallet resistance study by Kaur, Dhir, Bodhi and Singh (2020) revealed that security risk, financial risk and privacy concerns were the main barriers which did not relate to any functional benefit. The perceived security was also found to be an important antecedent of trust and the latter was an important mediator of adoption intention as reported by Shankar and Datta (2018). Namahoot and Laohavichien (2018) found that the perceived risk towards internet banking negatively affected the behavioral intention to use internet banking, which was more significant than convenience for the conservative users.

The influences of social factors (how much one believes they should use a technology because of a significant other) have been mixed. Patil et al. (2020) analyzed the adoption of mobile payments in India and found that social influences are important determinants of adoption, particularly if the network effects of merchants self-reinforce adoption. Theoretically, facilitating conditions (merchant acceptance, network connectivity, access to support) are important, but often these conditions, like the ubiquitousness of infrastructure, result in non-significant coefficients. Al-Okaily, Lutfi, Alsaad, Taamneh and Alsyouf (2020) found this for a sample in Jordan and noted that this could be attributed to the ‘ceiling effect' of the availability of the infrastructure.

2.3 Digital Payments in the UAE and the Gulf Context

Very little research has been conducted on the development of the Gulf and this number is increasing. Rahman, Ismail and Bahri (2020) conducted a study on the adoption of cashless transactions in emerging economies of the Gulf & Southeast Asia, the findings showed that the effect of government policy signalling has a relatively high effect in the countries where the government has a dominant role in the economy. For the Gulf Cooperation Council (GCC) countries, the use of digital payment and banking practices is systematically studied by alkhowaiter (2020) and the results showed the presence of context-specific factors such as trust and religiosity, which seem to lack in the western banking systems.

In a study, Al-Sharafi, Arshah, Abo-Shanab and Elayah (2019) investigated the relationship between perceptions of security and privacy and the resulting adoption of electronic payments among the Arab population, and concluded that the use of assurance tactics (in terms of visible authentication steps) was statistically significantly positively correlated with the intention to continue buying using electronic payments. Alsheikh and Bojei (2021) discussed Emirati and Saudi mobile banking users and found that the perceived credibility of the provider institution was more important than the quality of the interface to make up for continued use of the mobile banking service.

Another layer to the mix is the fact that the UAE's population is made up of a mix of different nationalities. Indeed, Kalinić et al. (2019) have provided evidence for the case of persistence of prior payment habits effects on behaviour in a new market in an economy where the majority of its residents is expatriates. Sahi, Khalid, Abbas and Khatib (2021) have explored evidence on financial inclusion and usage of digital payments and found that often, migrant groups engage in dual behaviour in that they use digital payments for remittance, and cash for local retail activity,

which is reflected in overall adoption data. All of the references cited here indicated that adoption is a result of multiple positive influences, sense of security, and social pressures, as well as systematic variations in adoption rates among groups of people. Such a synthesis is worked out in the case of the UAE in the current study.

3. Research Methodology

3.1 Research Design

This type of research is descriptive and explanatory cross sectional with quantitative design. The quantitative approach was chosen because objectives of the research involve measuring the strength and direction of relationships between the constructs defined, as well as testing the formally stated hypotheses. The research questions were descriptive and associational and not temporal, so the cross sectional design was appropriate and not a concern.

3.2 Population and Sampling

The target population is adult consumers (aged 18 years and over) in the UAE who have used any digital payment instrument in the past six months. The study employed purposive non-probability sampling approach due to the lack of publically available complete sampling frame for UAE consumers and snowball referral sampling to ensure that consumers have been exposed to digital payment channels. A total of 175 questionnaires were widely distributed on-line, and face-to-face, in shopping centres and university campuses throughout Dubai, Abu Dhabi and Sharjah. A valid response rate of 91.4 per cent (160 responses) was obtained after excluding uncompleted responses and those who did not answer the screening question on previous digital payment. Sample size = 160 is in the range of the standard rule of thumb n >= 10 m, where m is the number of variables measured, and n > 50 (2p + 3) for multiple regression when there are 5 predictor variables (at conventional levels of statistical power).

3.3 Instrument Development and Measurement

The data was gathered using a structured questionnaire which comprised two parts. Section A was used to get data about the demography, such as gender, age, education, monthly income, nationality grouping and frequency of using digital payment. Twenty-four items, 4 items to each construct, were included in section B representing the 6 constructs of the model. The items were taken from the literature on technology acceptance and reworded in terms of the payment context and the UAE environment, keeping all items previously prevalidated. Answers to part B were recorded on a 5 point likert scale from strongly disagree (1) to strongly agree (5). Perceived usefulness, perceived ease of use, perceived security, social influence and facilitating conditions were the independent variables.

The adoption intention was measured as the consumer's statement of his intention to use and continue to use digital payment methods when purchasing everyday products. A total of 20 were not included in the final sample but rather were used as a pilot test for the questionnaire. A number of minor wording changes have been made since the pilot to improve clarity of items that were misinterpreted as a result of local naming of some payment platforms.

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3.4 Data Analysis Techniques

All the data collected were coded and analyzed using IBM SPSS Statistics (Version 26). The following statistics procedures are used. Descriptive statistics (frequencies, percentages, means and standard deviations) were used to describe the sample and the distribution of construct scores. Internal consistency reliability was calculated for each construct, using a criterion of 0.70. Pearson product-moment correlation was analysed to explore the bivariate relationships among the constructs for any preliminary multicollinearity issues. For testing hypothesis 6, the mean score of respondents' intention to adopt was compared with male and female respondents by independent samples t-test. For testing the hypothesis (7) one way analysis of variance (ANOVA) test was used to test for differences in intention to adopt between four ages categories and Levene's test to test for homogeneity of variance. Hypotheses one through five were tested with multiple linear regression with simultaneous entry of independent variables in the regression equation. The variance inflation factors were evaluated to ensure that there was no severe multicollinearity and the residual plots were checked for normality and homoscedasticity. All statistical significance were tested at 5 per cent level.

3.5 Ethical Considerations

No pressure was placed on participation and all respondents were explained the academic aims of the research before they filled out the questionnaire. The information collected was not personal and the answers were anonymous and respondents could cancel at any time. No material gifts or offer of payment.

4. Results and Analysis

4.1 Demographic Profile of Respondents

Demographic characteristics of the 160 valid respondents are given in Table 1. The sample was well balanced in terms of gender, as men outnumber females and thus the general population of UAE. The age distribution was skewed towards the young working age as is common with the young working age population in the country. A large majority of respondents had at least a Bachelor's degree and the proportion of expatriates in the sample was reflective of the national resident composition.

Table 1: Demographic Profile of Respondents (n = 160)

Variable	Category	Frequency	Percentage
Gender	Male	88	55.0
	Female	72	45.0
Age	18–25 years	34	21.3
	26–35 years	61	38.1
	36–45 years	42	26.3
	46 years and above	23	14.4

Variable	Category	Frequency	Percentage
Education	Secondary or below	18	11.3
	Bachelor's degree	84	52.5
	Master's degree	48	30.0
	Doctorate	10	6.3
Monthly Income (AED)	Below 8,000	37	23.1
	8,000–15,000	56	35.0
	15,001–25,000	42	26.3
	Above 25,000	25	15.6
Nationality	UAE National	19	11.9
	Expatriate	141	88.1
Usage Frequency	Daily	71	44.4
	Weekly	54	33.8
	Monthly or less	35	21.9

Source: Primary data analysed using SPSS v26.

4.2 Reliability Analysis

The Cronbach's alpha coefficient for each construct is reported in Table 2. All values are above 0.70 with the highest being perceived security at 0.891 and the lowest being facilitating conditions at 0.782. It therefore shows good internal consistency and there were no items to be deleted for improved reliability.

Table 2: Reliability Statistics for Study Constructs

Construct	No. of Items	Cronbach's Alpha	Remark
Perceived Usefulness (PU)	4	0.864	Good
Perceived Ease of Use (PEOU)	4	0.831	Good
Perceived Security (PS)	4	0.891	Very Good
Social Influence (SI)	4	0.807	Good
Facilitating Conditions (FC)	4	0.782	Acceptable

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Construct	No. of Items	Cronbach's Alpha	Remark
Adoption Intention (AI)	4	0.876	Good

Source: Primary data analysed using SPSS v26.

4.3 Descriptive Statistics of Constructs

The means and standard deviations for each of the constructs are summarized in Table 3. The most positive average score was for perceived ease of use, indicating that digital payment interfaces are overall easy to use. The perceived security had a relatively low mean score and a high SD, indicating that there was an average and a wide range of perceptions about security of the sample. Facilitating conditions were rated high, as would be expected for an infrastructure that is mature, as described in the literature.

Table 3: Descriptive Statistics of Study Constructs (n = 160)

Construct	Mean	Std. Dev.	Minimum	Maximum
Perceived Usefulness	4.21	0.612	2.00	5.00
Perceived Ease of Use	4.34	0.578	2.25	5.00
Perceived Security	3.62	0.894	1.00	5.00
Social Influence	3.88	0.731	1.75	5.00
Facilitating Conditions	4.29	0.564	2.50	5.00
Adoption Intention	4.07	0.702	1.75	5.00

Source: Primary data analysed using SPSS v26.

4.4 Correlation Analysis

The Pearson correlation matrix is shown in Table 4. All the five independent variables were observed to be positively and significantly related to the adoption intention at 1% level of significance. The bivariate correlation is the highest for perceived security and intention to adopt, followed by perceived usefulness. Independent variables were also not highly correlated with each other (all inter-correlations less than 0.70) and variance inflation factors (VIF) were not excessive (all being less than 5, indicating no multicollinearity affecting the regression estimates).

Table 4: Pearson Correlation Matrix

Variable	PU	PEOU	PS	SI	FC	AI
PU	1					
PEOU	0.541**	1				
PS	0.463**	0.398**	1			

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Variable	PU	PEOU	PS	SI	FC	AI
SI	0.412**	0.357**	0.334**	1		
FC	0.489**	0.612**	0.371**	0.348**	1	
AI	0.658**	0.574**	0.694**	0.521**	0.483**	1

Note: ** Correlation is significant at the 0.01 level (2-tailed). Source: Primary data, SPSS v26.

4.5 Group Difference Tests

Table 5 shows the results of the independent samples t-test for the difference between the intentions to adopt of the male and female respondents, and the results of the one-way ANOVA for the difference between the intentions to adopt across the four age groups. The t-test assumed equal variances row was used because Levene's test was not significant. The t-test was not significant at five per cent, as it equalled 1.184 and a probability value of p = 0.238. Therefore, there is no statistical difference between the intention to adopt of gender in this sample, so hypothesis 6 is not confirmed. The ANOVA returned F(3, 156) = 7.412, p = 0.000, which is significant. The hypothesis was supported and post-hoc Tukey comparisons showed a significant difference between the 46+ group and the two younger groups, but there was no significant difference between the 18-25 and 26-35 groups.

Table 5: Independent Samples t-test and One-Way ANOVA Results

Test	Grouping	Statistic	df	p-value	Result
t-test	Gender (M vs F)	t = 1.184	158	0.238	Not Sig.
ANOVA	Age (4 groups)	F = 7.412	3, 156	0.000	Significant
Levene's test	Gender	F = 0.463	1, 158	0.497	Homogeneous
Levene's test	Age	F = 1.028	3, 156	0.382	Homogeneous

Note: Significance evaluated at p < 0.05. Source: Primary data, SPSS v26.

4.6 Multiple Regression Analysis

Table 6 shows the results for the multiple linear regression, which makes intention to adopt the dependent variable and the five independent variables the model's independent variables. The model is statistically significant, F(5, 154) = 48.976, p = 0.000, with an R value of 0.784, an R-squared of 0.614 and an adjusted R-squared of 0.601. When the five predictors are combined, they account for 61.4 per cent of the variance in adoption intention, suggesting that the model has a significant amount of explanatory power for such a behavioural model. The Durbin Watson statistic is 1.923 which is within an acceptable range (1.900 to 2.000); hence there is no evidence of serial correlation in the residuals. The coefficient of perceived security has the highest standardised beta (0.398) and standardised significance (0.000) of the coefficients; it is the strongest predictor of this proposed hypothesis. Perceived usefulness: It is supported by a beta value of 0.312, which is the second hypothesis. The social influence and perceived ease of use are

both significant with positive betas (0.207, 0.164) which support hypothesis 4 and 2, respectively. Facilitating conditions yielded a beta of 0.061, and a significance value of 0.402, both of which were not significant, thus, hypothesis five is rejected. Self-explanatory, no difference in significance was observed when it came to the facilitating conditions, as was anticipated in the literature searched. It has limited discriminatory power, as the near-universal acceptance of merchants, network coverage and availability of the devices in the UAE urban setting, which restricts the number of variations of this construct. The bivariate adoption intention association remains positive and significant although this association is picked up by the other predictors, particularly perceived ease of use's association with adoption intention at 0.612.

Table 6: Multiple Regression Results (Dependent Variable: Adoption Intention)

Predictor	B	Std. Error	Beta	t	Sig.	VIF
(Constant)	0.284	0.243	—	1.169	0.244	—
Perceived Usefulness	0.358	0.071	0.312	5.042	0.000	1.712
Perceived Ease of Use	0.199	0.078	0.164	2.551	0.012	1.884
Perceived Security	0.313	0.049	0.398	6.388	0.000	1.310
Social Influence	0.199	0.058	0.207	3.431	0.001	1.267
Facilitating Conditions	0.076	0.090	0.061	0.844	0.402	2.041

Note: $R = 0.784$; $R^2 = 0.614$; Adjusted $R^2 = 0.601$; $F(5,154) = 48.976$, $p = 0.000$; Durbin-Watson = 1.923. Source: Primary data, SPSS v26.

4.7 Summary of Hypothesis Testing

In total five of the seven hypotheses were accepted and two were rejected. Adoption intention is significantly related to the perceived usefulness, ease of use, security and social influence with the effect of perceived usefulness being the largest. There are significant differences between the adoption intention of the age groups, with the younger being more likely to have an intention to adopt than the older age groups. The difference of intention to adopt is not significantly different by facilitating conditions or by gender with the exception of the independent difference of facilitating conditions which is small.

5. Discussion and Conclusion

5.1 Discussion of Findings

The key takeaway from this research is that UAE consumers' perception of security and not functionality is a behavioural factor that can impact on the adoption of digital payments. The result corroborates with the literature on payment as it showed that wallet resistance is more important

than performance expectancy and trust is more important than performance expectancy, which also contradicts the general technology acceptance literature. Theoretically, the divergence is not as much of an issue here: If the content of a transaction is money, the perceived risk of failure or compromise is immediate and direct, and so the risk aversion is more of a factor in decision-making than in the adoption of nonfinancial technology.

This is confirmed by the descriptive statistics. The mean and highest SD for all constructs were for consumer confidence in using digital channels for safe payments, which suggested that user confidence with respect to safe payments via digital channels is not high and is not even distributed. There is quite a bit of discomfort in some of the sample. This is the largest regression coefficient and hence is the biggest "lever" that institutions can pull if they want to encourage adoption, especially in the presence of this.

It is important to note that the absence of significance of facilitating conditions is not a null finding of no importance, but rather a substantive finding: It references the UAE's achievement of infrastructure challenges amongst the urban population. It will not likely influence consumer purchases if a little more investment is done in merchant ports or in network coverage as the asset is no longer the constraint. It's no longer a supply-side constraint, it's a psychological constraint.

The gender effect combined with age (adoption profile) are lacking. It is remarked that the younger generations, who have been brought up in a society where digital channels are the norm, express greater intentions. It is a considerable distance to the oldest age group. Gender, on the other hand, does not discriminate and this implies that the digital divide in payments in the UAE context is generational and not gendered. The implications of this for the design of financial inclusion interventions are that they should be targeted by age, and not gender.

Social influence also remains to be networked, having a standardised beta of 0.207. The acceptance of a payment instrument increases and consumers are impacted by behaviour of their family, colleagues and peers. The results support the community level promotion and the use of referral-based promotion over individual based promotion.

5.2 Practical Implications

The proof points urge banks and fintech businesses to move beyond UI optimisation to making security assurance transparent and easy to understand. However, as well as integrity of the system it is also about the way that the protection is perceived by the consumers; technically strong systems will not be adopted if the protection information is not communicated in a way that consumers can understand. Transparent fraud liability policies, high prominence of transaction alerts, easy dispute processes and plain language explanations of authentication make more return than incremental addition of features.

But regulators have been saying that a security perception gap even in the presence of a strong supervisory regime is a communications issue, and not a regulatory one. Educating older population about financial literacy, as well as communicating existing consumer protection would go directly to the identified constraint instead of additional infrastructure requirements.

To merchants, the social influence discovery is the same: The more a merchant tells others that they are using a digital payment system, the more it becomes the norm for that merchant, and the more consistent it becomes within a locality for merchants to accept a digital payment, the more important a merchant's terminal becomes.

5.3 Limitations and Future Research

The above conclusions have been limited by a number of factors. The sample (160) was purposively selected from three of the more urbanized emirates, and is not statistically representative of the national population, and undersampling of populations in the northern emirates and rural areas. Thus, causal ordering might be more likely if a longitudinal design rather than cross sectional design would be used, which would give only one view of perceptions. There can be an intention-behaviour gap in self-reported intention to engage in the transaction but not the actual transaction. The full UTAUT2, including hedonic motivation and price value is not included as well as religiosity because it is assumed to be potentially relevant in literature from the Gulf. The findings of this study indicate a number of potential directions for future research that are worthy of consideration: Other larger probability samples may be useful; actual transaction data would be useful if available, as suggested by literature, as payment habits developed in the home country tend to be carried over to the host country; nationality of origin should also be added to the set of moderating variables; and other factors may be included in the study. A comparative study of the impact of the GCC states may also be helpful to identify the region-specific impacts from the UAE specific impacts as a result of its demographics.

5.4 Conclusion

This study aimed to identify the behavioral factors which influence the acceptance of digital payment systems by the consumers in United Arab Emirates (UAE). Data from 160 respondents were analysed in SPSS for reliability and correlation, t-test, ANOVA and multiple regression which yielded the finding that the factors of perceived security, perceived usefulness, social influence and perceived ease of use together explained 61.4 per cent of the variation in the adoption intention with perceived security being the most dominant factor. No independent effect was found for conditions to reflect the readiness of the UAE payment infrastructure, and the adoption intention varied by age groups, but was not different by gender groups. The UAE's biggest challenge to be a far more cashless shopping society might not be technologic but psychological, it would seem. Infrastructure set up, interfaces working and resources are available. Their perceptions that their money will be safe are the differences among consumers and what determines their actions. The country's important infrastructure capacities would best be applied towards behaviour change if institutions could see security as a communications and trust-building process instead of a technical one.

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