



# **The Impact of Digital Payment Systems on Consumer Buying Behavior in Urban Markets**

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## **Abstract**

The purpose of this research is to examine how usage of the digital payment systems might influence the consumer buying conduct in the city markets, and which aspects of adoption encouraged them to shop in this pattern. Based on primary and secondary data of 200 participants and complemented with independent literature, the study deploys descriptive statistics, correlation, and regression test to evaluate a nexus between the use of digital payments and behavioural responses to these. Findings indicate that convenience, feeling secure and trust, incentives and rewards, and integration of technology are influential in the buying behaviour although the most dominant is convenience. The increase in digital payments frequency is linked with higher levels of the purchase frequency, increased impulse purchases, the high satisfaction levels with merchants with digital solutions, and online shopping. The results are indicative and worth noting because the digital payment system is not a mere transactional method; it ultimately becomes strategic sources of consumer engagement and expenditures within the urban retail settings.

**Keywords:** Digital payment systems, consumer buying behavior, urban markets, convenience, security, incentives, etc.

## **1.1 Introduction**

Digital payment solutions, including mobile wallets, QR-code-based payments, contactless cards and Unified Payments Interface (UPI)-like rails, has quickly redefined point of sale and digital payments in the urban markets. Situations of high smartphone penetration, broadband connectivity and omnichannel shopping exposure also tend to predominate in urban consumers and present advantage of cashless payment behaviors adoption and routinization. These technologies are accelerating because of the convenience, built-in rewards, and easy



integration with e-commerce and ride-hailing environments and will increase data trails that can be utilised by retailers to personalise offers. It is against this backdrop that how digital payment systems are impacting the way consumers buy, namely what, where and how much consumers buy; their brand/store preference; the size of their baskets; and their loyalty are interesting to sensible companies and also of theoretical interest.

The foundational theories on adoption give a reason as to why such systems spread fast in urban areas. Technology Acceptance Model (TAM) argues that beliefs about helpfulness and convenience influence attitudes and purposes (Davis, 1989) whereas Unified Theory of Acceptance and Use of Technology (UTAUT) and its extensions promotes a concentration of performance expectancy, effort expectancy, and social impact and opportunity conditions (Venkatesh et al., 2003). These antecedents are exacerbated in urban contexts: densely connected social networks (social influence) strong infrastructure of acceptance (facilitating conditions), and high task-technology fit (e.g., rapid checkout by use of crowding). Meanwhile, perceived risk, trust, and habit development conditions whether the usage of the product is converted into permanent usage and more wide-ranging behaviors like increasing the frequency of purchase or engaging in channel switching (Oliveira et al., 2016; Zhou, 2013).

Empirically, the literature in mature and developing economies demonstrates that digital payments have the potential to promote frictionless transactions, create price elasticity through real-time discounts/cashbacks and they can also be used to incentivize consumers to adopt merchants/Platforms in a payments ecosystem. The COVID-19 era also hastened touchless and distant payments, which solidified the belief that they are hygienically sound, as well as accustomed the world to cash-free habits that did not end at the end of lockdowns (Sheth, 2020). Heterogeneity is there, however: the perceived security, data privacy issues, first-time trust, and the form of payment technology (e.g., a QR or NFC-based one) moderates the strength and the direction of the impacts on the purchase behavior (de Luna et al., 2019; Li eabana-Cabanillas et al., 2018). The paper is valuable because it also concentrates on the urban markets particularly, where the factors of infrastructure, marketing incentive and social diffusion are prominent to the greatest extent and because it ties in the drivers of adoption with downstream consequences of purchase.



## 2.1 Literature Review

Initial projects in respect to mobile payments based their implementation story on a qualitative exploration of the context of use, risks, and value offers (Mallat, 2007). Following quantitative research revealed a stable predictive pattern of anticipation of adoption that includes a basic number of the factors mentioned names with perceived usefulness and ease of use (TAM), social influence and facilitating conditions (UTAUT/UTAUT2), perceived risk/security and trust (Davis, 1989; Venkatesh et al., 2003; Oliveira et al., 2016; Kim et al., 2010). Meta-analytic and international results support the fact that performance expectancy and trust increase the strongest levers, whereas risk and complexity weaken intentions (Dahlberg et al., 2015; LiEbena-Cabanillas & Lara-Rubio, 2017).

Belief and danger. At the initiation stage as well as in the continuance stage, trust plays a critical role. The initial trust depends on provider reputation, perceived security, and quality of interface; it minimizes the uncertainty during high stakes, remote transactions (Zhou, 2011; 2013). Means of security and privacy assurance, as recognized through tokenization, two-factor authentication, and transparent data policies, reduce the perceived risk, which, indirectly, increases intention and satisfaction (Oliveira et al., 2016; Kim et al., 2010).

Interpersonal power, fun, and rewards. Social indicators ( peer use, merchant notification) new hedonic factors (effortless, convenient brush-n-go) reinforce adoption by younger subgroups in dense urban networks ( Koenig-Lewis et al., 2015). Platform incentives cashbacks, instant discounts, loyalty points all translate to Telco-like measurable buying shifts: increased c-ticket frequency, cross-border merchants, and impulse increases as a result of payment muffled cost-factoring. In spite of the fact that numerous research papers are devoted to intention instead of behavior, the mechanism is obvious: the incentives increase the perceived value and the strength of the habit, thus encouraging the practice.

Technological type and circumstance. Not every digital payment can be compared to each other. Comparative research indicates that technology-driven drivers, market-driven drivers, and cultural drivers based on technology (e.g., NFC vs. QR), market structure, and culture may differ (de Luna et al., 2019; Li epsilon-Cabanillas et al., 2018). Due to the low price of



hardware and wide smartphone compatibility, QR-based systems spread quickly in urban environments in emerging countries, where small retail stores and street vendors expand their acceptance of these systems. Such omnipresence of acceptance enlarges the possible set of consumer options, including store selection and basket composition.

Intention to continuance and behavior. One critical strand focuses on continuance intention that is the probability that users continue after testing it. Research connects the quality and the confirmation of expectations on the system and services to satisfaction and further usage (Zhou, 2013). Continuance is important to buying behavior in that durability in use alleviates transaction friction in the long run, thus poses a higher likelihood on cashless and fast-checkout buying and further engagement with related retail apps (i.e. catalogs in-app, saved cards, one-click ordering).

The COVID-19 as the adoption shock. The negative impact of the pandemic was that it led to exogenous drive to contactless and remote payments, the most significant effect occurred in urban areas where lockdown was more restrictive and merchants more digitally advanced. These circumstances theoretically increased the usefulness (speed, safety) and social norm (everyone is tapping) and lead to the faster development of the habit (Sheth, 2020). Although certain impacts were short-lived, numerous users sustained digital payment habits even after reopening, which suggests permanent change in purchasing behaviour (e.g. more shopping in online/ offline combinations, larger basket disintegration into a number of smaller digital purchases).

**2.2 Gaps and implications:** There is diminished pre-2022 evidence directly quantifying causal effects on spending, category mix, or price sensitivity in urban areas despite solid evidence on antecedents to adoption. Demographic, tier of merchants (organized retail vs. micro-merchants), and modality of technology are under-explored in their heterogeneity. Moreover, they should study to unpack the “ecosystem effects” how wallet/platform features (with embedded credit, BNPL, loyalty) moderates basket size and brand switching. Closing those gaps is one way in which urban retailers and policymakers may seek to shape payment infrastructures and incentives that will maximize consumer welfare without increasing the dangers of over-spending and privacy invasion.



### **3.1 Objective:**

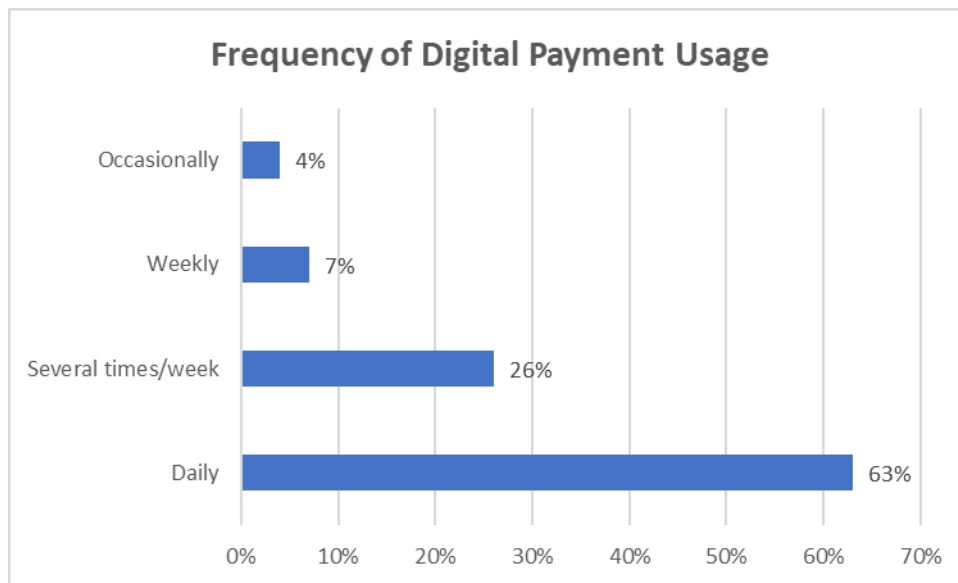
This research is aimed at scrutinizing how digital payment systems have affected the consumer buying behaviour in the urban markets with reference to factors that enhance the adoption and their usage, buying pattern and behaviour, how the benefits and ease of payments will influence the consumers behaviour, spending and overall market places.

### **3.2 Methodology:**

In carrying out this study, a descriptive and analytical research design will be used to determine how digital payment system has affected consumer buying behavior in urban markets. The analysis will include data collected using a structured questionnaire that will be given to a purposive sample of urban consumers who make use of digital payment systems. The information covered by the questionnaire will be demographic information, payment using patterns, perceived benefits, trust aspects and purchasing behavior changes. The target sample size of 200 respondents will be considered to have a good representation. The secondary information will be based on articles, industry reports and government reports. The analysis of collected data will be conducted with the help of the descriptive statistics, correlation, and regression in order to establish relationships between digital payment adoption and the buying behavior of consumers.

### **4.1 Results and Discussion:**

Respondents of the study were 200 participants in urban areas who were asked to determine the effects of digital payment systems on their purchase behavior. Descriptive statistics, correlation and regression analysis was used to determine the relationship between payment adoption and buying patterns based on the data.



**Fig. 1 Frequency of Digital Payment Usage**

Digital payment adoption is remarkably high, with 63% making daily payments, which embraces strong penetration into their shopping and lifestyles. The frequent use implies familiarity, reliability, and convenience as the main adoption factors.

**Table 1 Effect of Digital Payments on Purchasing Behavior**

Behavioral Change	Agree (%)	Neutral (%)	Disagree (%)
Increased frequency of purchases	68.5	20.0	11.5
Increased impulse buying	61.0	25.5	13.5
Preference for merchants offering DP	72.0	18.0	10.0
Larger transaction amounts	55.0	27.5	17.5
Shift to online shopping	64.5	21.0	14.5

Table 1 shows that penetration of digital payment methods has a significant impact on consumer behavior when it comes to purchasing decisions and urban market operations. The percentage of those who prefer the merchants able to accept digital payments is massive 72%, which indicates that payment flexibility is very high and relevant to their choice of vendors. Moreover, 68.5 percent reflected that purchase frequency was higher after the cashless transactions, implying that the fast, convenience of buying is motivating the need to purchase.



Also influenced was the propensity of doing impulsive buying whereby 61 per cent responded in line with the argument that digital payment results in unplanned purchases, perhaps occasioned by the lower pain of paying and the fact that the payments are instantaneous. Likewise, 55 percent stated that the value of their average transaction has risen and this could represent a correlation between the ease of going cashless and the amount of money spent. In addition, 64.5 percent gave the increase in online shopping as an example and this could be contributed due to the smooth processing of digital payment systems within e-commerce sites.

In sum, as it is salient in the table, digital payments are part of the transactions brought about, but they also amount to consumer behavior that builds on increased frequency, bigger basket sizes, and loyalty to merchants who have gone digital.

**Table 2 Correlation between Digital Payment Adoption and Buying Behavior Variables**

Variable	Correlation Coefficient (r)
Frequency of Digital Payment Usage vs. Purchase Frequency	0.68**
Frequency of Usage vs. Impulse Buying	0.54**
Frequency of Usage vs. Basket Size	0.49**
Usage vs. Preference for Online Shopping	0.57**

\*\*  $p < 0.01$  indicates strong statistical significance.

As the Table 2 correlation indicates there is a strong statistically significant correlation between the frequency of the use of digital payments and several factors of consumer buyer behavior. Frequency of digital payment usage has the maximum correlated relationship with purchase frequency ( $r = 0.68$ ,  $p < 0.01$ ), that is, the greater the frequency of digital payment usage, the more frequent purchases made.

There is a moderately strong correlational relationship between the frequency of digital payments and the preference to shopping online ( $r = 0.57$ ), which points to the direction that digitally frequent users tend to be more app-based and virtual shopping oriented. On the same note, payment usage and impulse buying have high positive correlation ( $r = 0.54$ ), which is consistent with the assumption, utilizing an accessible mode of payment reduces the impediments to walk-in purchases.



Finally, the relationship between the frequency and the basket size,  $r = 0.49$ , indicates that the more often people use it, the more significant the size of their transactions is likely to be, perhaps as a result of its convenience of payment and incentives built in (cashback or loyalty points).

Altogether, the results suggest that greater use of digital payment systems in urban markets does not represent a mere mode of transaction change, but a change that initiates a purchase pattern, increasing the frequency, online shopping, impulse buying, and the same spending level.

**Table 3: Regression Model**

Predictor Variable	Beta ( $\beta$ )	t-value	Sig. (p)
Convenience	0.42	6.85	0.000
Security & Trust	0.31	5.14	0.000
Incentives & Rewards	0.28	4.62	0.000
Technological Integration	0.19	3.11	0.002
<b>R<sup>2</sup> = 0.62, F = 78.15, p &lt; 0.001</b>			

The regression (Table 5) helps to define the key factors that affect the determinants of the influence of digital payments on the consumer buying behavior in the urban markets. The strongest predictor is convenience ( $b = 0.42$ ,  $p < 0.001$ ) that is, speed and ease of use, and accessibility of digital payments. The second-most significant criterion ( $\beta = 0.31$ ,  $p < 0.001$ ) concerns security and trust since consumers would be more inclined to try and persist in using digital payment systems in case they were assured that their data were kept safe and their transactions secure.

It is also true of incentives and rewards ( $0.28$ ,  $p < 0.001$ ), which indicates that an incentive /promotions, cashback, and campaigns transforming Notification to Loyalty were valuable enough to push shoppers to use digital payments more, and even spend more money at checkout. Technological integration (e.g. compatibility with e-commerce websites, mobile apps, QR, NFC-based tools) has a more minor, but still a notable impact ( $b = 0.19$ ,  $p = 0.002$ ), which implies its contribution to increasing the convenience and accessibility.





The  $R^2 = 0.62$  value of the model indicates that 62 percent of the variance in consumer buying behavior can be attributed to these four factors whereas the large value of  $F (78.15)$  and low value of  $p (< 0.001)$  ensures that the model as a whole is significant. This is indicative of a high predictive relationship and when convenience, security, rewards, and integration are improved, it can have significant effects on buying behavior within the urban markets.

### **5.1 Conclusion:**

The study comes to an agreement that digital payment systems play a major role in regulating consumer purchase behavior across the urban markets via establishing ease in transactions, building faith in cashless transactions, and providing incentives that encourage more purchases. It is indicated in the analysis that the increased use of digital payments is strongly connected to increased frequency of purchases, a larger urge of impulse buying, preference toward merchants that offer their services digitally, and online shopping habits. There are key determinants of these behaviors which include: convenience, security and trust, incentives and rewards, and integration of technology and it is vital to note that convenience has been identified as the most critical determinant in shaping such behaviors. In general, digital payments are no longer only a form of a transaction but also they become the driver of shifting purchase patterns and market relationships in the city market.

### **5.2 Recommendations:**

Depending on the results of the study, one of the recommendations is that the systems of digital payments should continue to enhance the convenience of their use by increasing the speed of carrying out the payments, having user-friendly interfaces, and by becoming more generally acceptable by the types of merchants. Enforcement of heightened security measures and effective communication of the same has the capacity to earn the consumers more confidence. Optimistic incentives like cash back, loyalty requirements, special offers can make customers to use the services more often and spend more funds. To win and retain customers, retailers have to incorporate in their checkouts the various modes of digital payment both online and offline. Moreover, the limited use of payment technology can be accelerated by targeted marketing in urban markets and collaborations between payment providers and storefronts can foster positive and profitable ecosystems that deliver customers and stimulate spending.



## References

- Dahlberg, T., Guo, J., & Ondrus, J. (2015). A critical review of mobile payment research. *Electronic Commerce Research and Applications*, 14(5), 265–284. ([ScienceDirect](#))
- Davis, F. D. (1989). Perceived usefulness, perceived ease of use, and user acceptance of information technology. *MIS Quarterly*, 13(3), 319–340. ([JSTOR](#), [ResearchGate](#))
- de Luna, I. R., Liébana-Cabanillas, F., Sánchez-Fernández, J., & Muñoz-Leiva, F. (2019). Mobile payment is not all the same: The adoption of mobile payment systems depending on the technology applied. *Technological Forecasting and Social Change*, 146, 931–944. <https://doi.org/10.1016/j.techfore.2018.09.018> ([IDEAS/RePEc](#), [openaccess.uoc.edu](https://openaccess.uoc.edu))
- Kim, C., Mirusmonov, M., & Lee, I. (2010). An empirical examination of factors influencing the intention to use mobile payment. *Computers in Human Behavior*, 26(3), 310–322. ([David Publisher](#), [Diva Portal](#))
- Koenig-Lewis, N., Marquet, M., Palmer, A., & Zhao, A. L. (2015). Enjoyment and social influence: Predicting mobile payment adoption. *The Service Industries Journal*, 35(10), 537–554. ([IDEAS/RePEc](#), [ORCA](#))
- Liébana-Cabanillas, F., Marinkovic, V., Ramos de Luna, I., & Kalinic, Z. (2018). Predicting the determinants of mobile payment acceptance: A hybrid SEM–neural network approach. *Technological Forecasting and Social Change*, 129, 117–130. <https://doi.org/10.1016/j.techfore.2017.12.015> ([IDEAS/RePEc](#), [SCIRP](#))
- Liébana-Cabanillas, F., & Lara-Rubio, J. (2017). Predictive and explanatory modeling regarding adoption of mobile payment systems. *Technological Forecasting and Social Change*, 120, 32–40. <https://doi.org/10.1016/j.techfore.2017.04.002> ([IDEAS/RePEc](#))
- Mallat, N. (2007). Exploring consumer adoption of mobile payments—A qualitative study. *The Journal of Strategic Information Systems*, 16(4), 413–432.
- Oliveira, T., Thomas, M., Baptista, G., & Campos, F. (2016). Mobile payment: Understanding the determinants of customer adoption and intention to recommend the technology. *Computers in Human Behavior*, 61, 404–414. ([ScienceDirect](#))
- Sheth, J. (2020). Impact of COVID-19 on consumer behavior: Will the old habits return or die? *Journal of Business Research*, 117, 280–283.



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ISSN 2249-3352 (P) 2278-0505 (E)

Cosmos Impact Factor-5.86

- Venkatesh, V., Morris, M. G., Davis, G. B., & Davis, F. D. (2003). User acceptance of information technology: Toward a unified view. *MIS Quarterly*, 27(3), 425–478. ([JSTOR](#))
- Zhou, T. (2011). The effect of initial trust on user adoption of mobile payment. *Information Development*, 27(4), 290–300. ([SAGE Journals](#))
- Zhou, T. (2013). An empirical examination of continuance intention of mobile payment services. *Decision Support Systems*, 54(1), 1085–1091. <https://doi.org/10.1016/j.dss.2012.10.034> ([SCIRP](#))