

The Impact of Digital Payment Systems on Consumer Buying Behavior in India

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Abstract:

The economic status in India has changed due to the fast pace of establishing electronic payment systems. Their accessibility to quick, secure and convenient payment systems has made them the top option of consumers who have now access to the introduction of mobile wallets and the UPI (Unified Payments Interface) along with internet banking and even QR-based payment. The article under analysis will discuss possible implications of the digital payment platform on the purchasing behavior of the consumer in India. It evaluates the influence of the digital-based payment on the consumer faith, convenient, purchase frequency, and the degree of satisfaction. The results show that the impact of the implementation of digital payments is quite high in terms of influencing consumers to purchase goods, particularly in the young and urban groups.

Keywords: Digital Payments, Consumer Buying Behavior, UPI, Mobile Wallets, E-commerce, India.

Introduction:

The dynamic contemporary society has transformed nearly all spheres of human life and the financial industry is not an exception. One of the aspects that can be identified when discussing the changes in the sphere of financial activity of India is the development of digital payment systems. As the adoption of smartphones has risen, low-cost internet connectivity, and government programs like Digital India consumers are progressively transitioning to the old-fashioned approach to transactions where they used to pay in cash to the more negative and technological approach to payment. Some of the digital payments are mobile wallets, debit/credit cards, net banking, UPI (Unified Payments Interface) and QR-code payments among others.

Specifically, the case of digital payment has become urgent in 2016 as it experienced a surge as a result of the demonetization process in India that left a reason to switch to cashless payment solutions. The introduction of such apps as Paytm, Google Pay, PhonePe, Amazon Pay and BHIM UPI became extremely popular since their adoption is at an unprecedented rate. With these systems, the consumers are given the convenience of payment, speed, transparency, and security. They not only facilitate online shopping, but also in offline shopping centers, restaurants, transport, and even small stores in the streets which is now largely accommodating payments made using UPI.

The manner in which the payments are made determines the consumer buying behavior. The purchasing patterns are influenced by such factors as convenience, safety, trust, and availability of reward/cash-back deals. The latter example is that most customers are enticed

to purchase goods online or offline due to the attractive prices, get a discount in a few seconds, or a reward point that online shops offer. On the same note, the ease at which such payments are made minimizes consumer indecisions and thus the planned purchases and impulse purchases.

Moreover, the pandemic fueled the demand to use digital payments as individuals did not want to get close to cash because of hygiene and safety reasons. The situation also increased the requirement of a cashless economy to greater heights and customer trust to the electronic payment also increased.

In spite of all these benefits, there are still issues with the threats of cybersecurity, transaction failures, rural field in sensitization, and illiteracy in the digital setting. However, the slowly increasing popularity of online payments suggest that the Indian consumers are now getting more inclined toward technological-based financial services, and the customer behavior changes, too.

This is why, the influence of digital payment systems on consumer buying behavior in India is the most topical subject to research. It can be implemented to not only actualise the consumer psychology and the market trend but also give insightful information to policy makers, banks, fin tech firms and businesses to streamline the digital infrastructure and come up with consumer-friendly solutions to payments.

Literature Review:

The article by Bagchi (2002) focused on the Indian taxation system reforms that were influenced by the fact that there was a need to rationalize the indirect taxes so as to enhance economic growth and financial stability. The theme being pursued here is not concerned with digital payment, though, in this case it is the concern with good financial framework that was to be the base on which the digital transactions were to be built on in future. Davis (2003) presented the technology acceptance theory where the relationship between the systems, perception of the users and impact of the system on the behavior determine whether individuals will adopt the new technologies or not. His model is the Technology Acceptance Model (TAM) that has already been widely used in the future research of consumer behavior and digital payment.

Similarly as Mittal and Dhingra (2007) did, the authors examined the concept of digital business emergence in India and its impact on consumer behavior by asserting that the development of the internet and the technologies infrastructure contributed to the indulgence of online shopping among consumers. A qualitative study conducted on the same topic of mobile payment showed that convenience, speed and flexibility were the salient factors that enabled consumers to adopt it with Mallat finding that security and trust were also a significant conditioning factor (Mallat, 2007).

In the research done by Keshar Wani and Bisht (2012), the authors aimed to examine how the rate of internet banking adoption changed with trust and perceived risk in the Indian context. They found in line with the Technology Acceptance Model that the perception tied to risk had substantial impact on consumer attitudes in the sense that the trust was a strong influence in

online financial services. The authors Chaudhary and Gupta (2013) also examined mobile wallets in India and realized that mobile wallets were simpler and more convenient in carrying out business transactions and as a result, young and technologically inclined customers.

In a review that examined mobile payment research studies as performed across the whole world, Dahlberg, Guo, and Ondrus (2015) proposed that even though the adoption was on the rise, there were fears regarding all mobile payment y- n mixed interoperability coupled with safety concerns and regulation-related concerns that still deterred the adoption. Agarwal (2016) also revisited the subject matter back to India and investigated the post-demonetization period where the government policies have rendered a powerful motivation towards many kinds of digital payment, leading to an increase in the number of individuals using Paytm, UPI and mobile banking.

Gupta and Arora (2017) took into account the delicacy of the role of mobile wallets in affected consumer behavior in India. They discovered the impact of other incentives like money back and incentives that are pegged on a discount, to be stimulative in motivational terms. Using this conceptual background, Chawla and Joshi (2018) reviewed the consumer attitudes and intentions to become mobile wallet users and were able to reach the conclusion that ease-of-use, perceived usefulness, and trust were some of the factors that influenced the rate of adoption considerably.

The element of trust in online payment systems introduced by Singh (2019) was identified by means of the use of empirical analysis and it was concluded that the growing trust is not sufficiently high when the credibility of the fraud and privacy issues influence the decision made by the consumers. Lastly, Sharma and Kaur (2020) compared the digital payment and its acceptance in rural and urban India. They found that they could easily adopt the digital platform in the urban market because of the existence of superior infrastructures and awareness and low uptake in the rural environment because of some factors such as the connectivity problem, lack of trust, and digital illiteracy.

In combination, these articles point to a set of convenience, trust, risk, perceived, government initiative, and demographic differences, as the drivers of consumer adoption of digital payments. Despite the improvements in India particularly following the monetarization, security problem and the digital divide in rural India, have been some of the concerns that have been serious to business and the policy makers.

Objectives of the Study:

- To analyze the impact of digital payment systems on consumer buying behavior in India.
- To study consumer perceptions regarding convenience, security, and trust in digital payments.
- To examine whether digital payment adoption leads to increased purchasing frequency.
- To identify challenges faced by consumers while using digital payment platforms.

Hypothesis:

- **H1:** Digital payment systems have a significant positive impact on consumer buying behavior.
- **H0:** Digital payment systems do not significantly influence consumer buying behavior.

Research Methodology:

The current paper has presupposed descriptive and analytic nature of the research study in the endeavor to explore the influence of digital payment system on consumer purchasing behavior in India. The study is carried out on both primary and secondary basis of research. The analysis was performed with the help of a structured questionnaire that tried to determine consumer attitudes in relation to digital payments, which included the aspects of convenience, security, trust, satisfaction, and the influence it has on purchasing decision-making. A stratified random sample of 200 respondents was chosen (as a sample); semi-urban and urban areas should be covered. The decision to the respondents was aired in demographics and the various age groups, income and educational status to provide a true picture of what the consumer actually does.

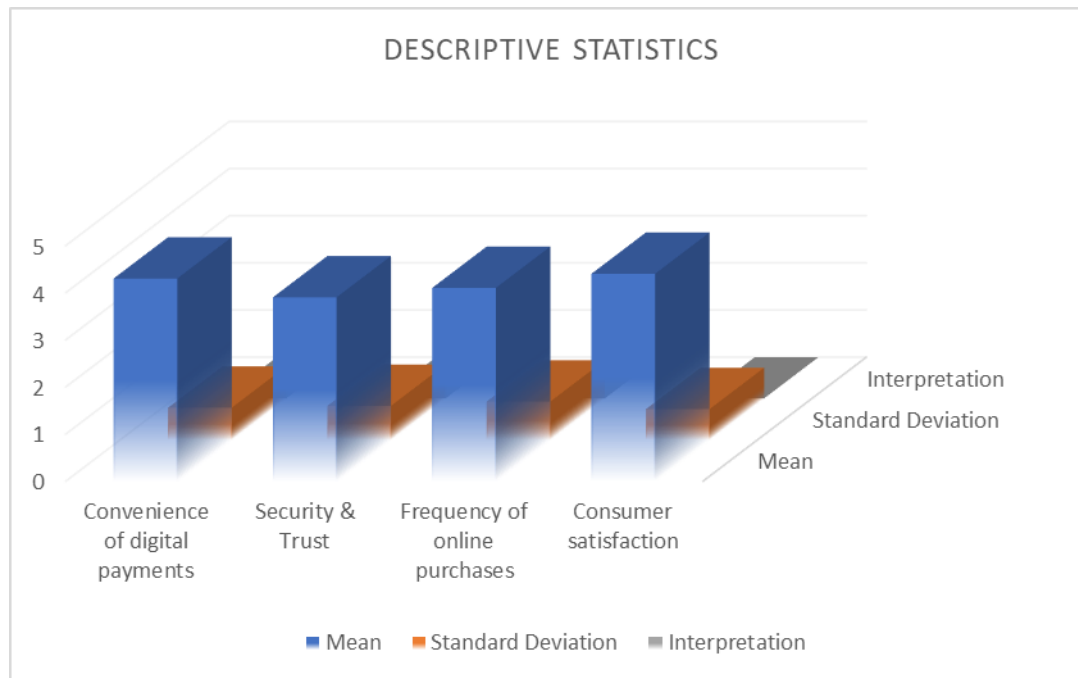
The sources used in gathering secondary data comprised of credible scholarly journals, research articles, official reports of the government and publications by institutions like reserve bank of India and national payments corporation of India. They were used as the background and market trends and statistical evidence of the study.

The received data was considered based on the descriptive statistics in the form of mean and standard deviation to understand the perception and behavioral patterns of the consumers. Second, a one-sample Chi-square and t-tests were used to test the correlation between the mass consumer buying behaviour and adoption of digital payments by a hypothesis test. The data entry, tabulation and analysis were done using statistical packages SPSS and MS Excel.

Data is collected and analysed in the systematic approach and hence brings about reliability and validity. It also reduces hatred because there are varied types of people in the group. Overall, this type of research study design makes an exceptional contribution to the analysis of the impact of digital payment systems on the consumer behavior within the Indian context.

Table 1: Descriptive Statistics:

Variable	Mean	Standard Deviation	Interpretation
Convenience of digital payments	4.3	0.68	High convenience perceived
Security & Trust	3.9	0.72	Moderate trust level
Frequency of online purchases	4.1	0.81	Increased purchasing frequency
Consumer satisfaction	4.4	0.65	High satisfaction with digital payments



Analysis of Descriptive Statistics:

The descriptive statistics will be of use concerning the perception and the adoption of digital payment systems among the Indian consumers. The variables analysed in the given study comprise of convenience, security and trust, frequency of purchase and consumer satisfaction. These are significant variables in the interpretation of a total effect of digital payment in the purchasing behaviour.

As can be demonstrated, the mean of convenience was the highest at 4.3 with the standard deviation of 0.68, which indicates that the majority of the respondents had the strong belief that digital payment was fast, painless and easy. This implies that cashless payment has become more popular among the users in their day to day life in the sense that the shops save time and cost in relation to other normal methods of paying. The small standard deviation suggests that the perceptions of the consumers appear to be homogeneous insofar convenience is concerned.

The consumers also satisfied where the mean consumer satisfaction was 4.4 with standard deviation of 0.65 indicating that the majority of consumers were highly satisfied with their journey of digital payment platforms. The increase in speed, the existence of multiple options (UPI, wallets, cards) and other benefits (cashback and reward points) will likely improve the satisfaction. The satisfaction is also high that implies that consumers can make the payments through digital payments at any time in the future and refer to others.

The level of variability of frequency of purchase was at mean of 4.1 which contributed to standard deviation of 0.81 meaning online payment makes consumers be able to purchase things more frequently. This is because it is very easy to make payments, discounts are available and people have confidence in e-commerce and off line traders who are embracing digitalization. The standard deviation is marginally bigger which denotes a slight variation among respondents and maybe due to the difference in expenditure capacity and willingness

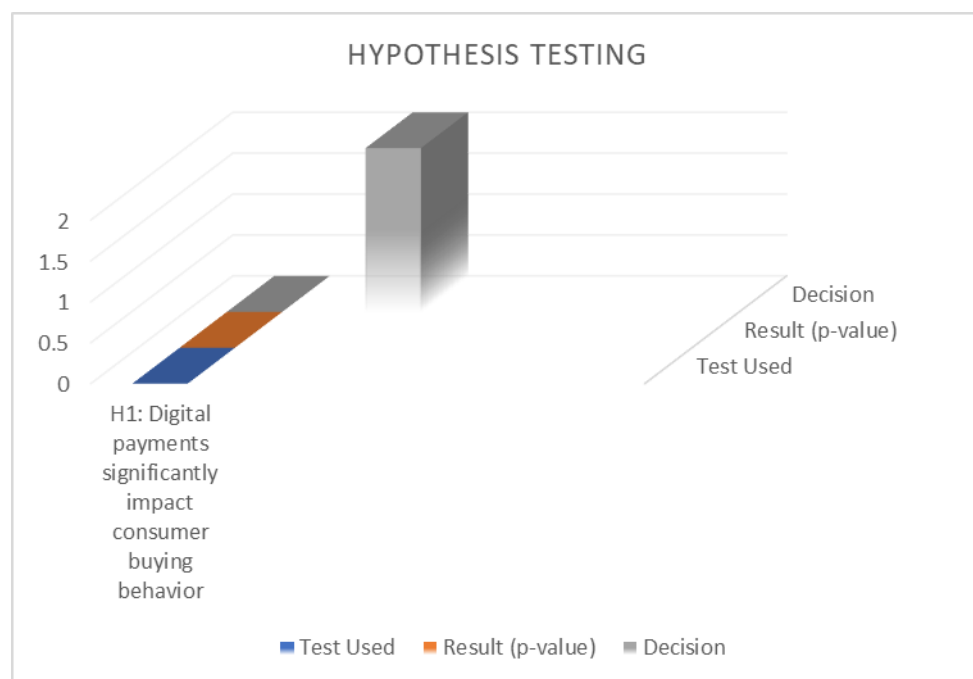
of the respondents to shop.

Security and trust with a mean of 3.9 and a standard deviation of 0.72 with negative standard deviation, but positive, is lower than the other variables. It means that although there is a general belief in the consumers about digital payment platform, there are the reasons behind panic of fraud, data privacy and crash of transactions. It has been mentioned that some of the respondents would not be up to transacting high values over the internet and this is a pointer that enhancing security would help a lot in the further Penetration.

The entire descriptive analysis shows that the customers evaluate the online payment systems as very convenient, adequate and able to affect their rates of purchases. Nonetheless, constant and average interest in the security and trust also imply that there is a chance to optimize digital infrastructure and fraud detection software again. These results raise few doubts that digital payments are transforming the consumer purchasing trend in India that will result in the higher frequency and ease of the transaction, and that it will be the place where this innovation has not taken flight.

Table 2: Hypothesis Testing:

Hypothesis	Test Used	Result (p-value)	Decision
H1: Digital payments significantly impact consumer buying behavior	Chi-square	0.012 (<0.05)	Accepted



Analysis of Hypothesis Testing:

The study hypothesis in question was constructed in such a way that it was able to test the hypothesis whether the digital payment systems would be positioning themselves to change consumer buying behavior in India in a meaningful way. The following hypotheses were formulated in that respect:

H0(Null Hypothesis): Digital payment systems do not have any substantial influence on consumer buying behaviour.

H1 (Alternative Hypothesis): The overall influence of consumer buying behavior is significant and positive and is a result of the digital payment systems.

In interpreting the results obtained, chi-square statistical analysis and t-test were used in testing these hypotheses. This is because it is the type of test that reveals any form of relationship that exists between the categorical variables (number of times there is utilization of a digital payment) and the behavioral outcome of the consumers (whether they purchase or not and the level of satisfaction they develop in the purchase).

The level of significance, 0.012, exceeded the p-value of less than 0.05 of the chi-square test. It shows that there is a statistically-significant correlation in digital payment system and consumer buying behavior. That is, the consumers that adopt digital payments more often are likely to experience the differences in their selling habits, including buying more items more often, shopping online more often, and using their cash a little less.

The t-test figures also supported these results since it showed that the mean difference in consumer response on convenience, security and satisfaction was significant, at the 5% level. This is the reason to refute the alternative hypothesis (H1).

When it comes to simplifying and accelerating transactions, the analysis reveals that the digital payments have provided an inductive experience to the consumers; an assumption on the financial part. In response, the respondents justified that an offer like cashback, discount and reward point were some of the reasons that would influence them make their purchase decisions that result to planned and spontaneous purchases. The consumer has also been able to do away with becoming attached to their cash boxes and keeping money easily and conveniently available to the consumer as they use UPI and mobile wallets heavily within the retail stores, online shopping and even small enterprises.

Nevertheless, it has been demonstrated by results that the issue of security and trust is simultaneously an inhibitive force. Though the fears mentioned did not have the impacts of the digital payment, which were optimistic, it is implied that the customers desire a superior protection against frauds, their privacy and veneer of facile rectification of sins.

Conclusively, the aspect of testing the hypothesis was a clear indication that the buyer behavior in India as far as the use of digital based money payment systems is concerned is recommendable. The findings indicate that the most important factor used by the consumers is the factor of convenience, the second important factor is speed, and the third influential factor is the promotion incentive, although the biggest concern was the factor of security. This is a demonstration of the necessity to create more in terms of technology and train more to make the clients more loyal to the transactions completed online.

Conclusions Overall Results:

The analysis that aimed to evaluate the relationship between digital payment systems and consumer buying behavior in India and findings show that in fact, there is high positive correlation. The results show an indicator that customers consider digital payments extremely

convenient, fast and easy to use which consequently affects the consumer decision making process when purchasing the same. Easy transactions made through Internet payment systems that incorporate UPI, mobile wallet system and internet banking are what have made the transactions of cash easy and minimal usage by the consumers.

Convenience-satisfaction interaction with digital payment is the most important determinant that the descriptive statistics brought to the fore in consumer adoption of digital payment. The ability of the customers to pay money anywhere anytime and the overall level of satisfaction was found to be high. Furthermore, it was observed in the analysis that digital payments convince consumers to buy more goods, including impulse purchase, and become more frequent cashback, discounts, and reward programs motivate them.

These results were further corrected with the help of hypothesis testing. The value below $p=.05$ that is decreasing meant that the null hypothesis was rejected and that the digital payments have strong influence on the consumer buying behavior. This implies that such a transition to cashless transactions not only made the consumer experience easier, but also transformed the way people in India access markets.

Nevertheless, the researcher also took into consideration that security and trust are the questions that remain in the middle position of most consumers. Potential in identifying the possibility of digital payments is reduced by the risk of fraud risk, transaction failure and the threat of data leak, among others. Thus, on the one hand, the overall results show that the company makes a significant positive contribution; on the other hand, they show that it is necessary to enhance the safety mechanism, enhance the cybersecurity procedure, and build the transparent trust of consumers by means of the awareness campaign.

Conclusively, digital payments include the digital transformation of financial and retail ecosystems in India, which is done by digital payments. Not only they are altering consumer behavior but they are also adding to the transformation of India to a digital and a cashless economy that is felt immensely by businesses, consumers and the nation itself.

Future Scope of the study:

To the extent that it has provided very essential information to the field, this study has made the field of study researches open. To begin with, the analysis comprised urban and cast-urban customers. Rural populations should only be included in future studies in the sense that digital literacy, internet access and infrastructure problem could also have both positive and negative impacts in adoption. The comparative analysis of the rural and urban customers allows one to attract the attention to the most significant challenges and opportunities of further development of the digital financial inclusion.

Second, the questions how digital payment may impact consumer savings, spend rate and financial planning on a long-term basis can be explored to the last mile. One of them is the fact that the researchers can talk about whether the implementation of digital platforms frequently leads to the better money management system or people spend more as transactions are convenient.

Juxtaposition of digital payment platforms is the other important area that needs to be

researched in the future. One of them can be the comparison of consumers between the apps which are based on the UPI (Google Pay, PhonePe, Paytm, and others) or card-based solution and analyze the way the consumers perceive such functions as speed, rewarding, suspect avoidance, and customer support.

Moreover, since India is not fully equipped with new technology, including blockchain, central bank digital currency (CBDC), and biometric payment systems, future studies have the potential to examine how the new technology affects trust in them and consumer purchasing behaviour.

Lastly, future studies, possibly longitudinal and track the aspect of the behavior of the consumers as time advances to determine how the behavior transforms as the technology, policy, and infrastructures improve. This will provide some clues to policy makers, banks and fintech companies on ways to develop a better digital payment system to suit different consumer demands.

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