Adoption and User Behaviour Towards Digital Payments by Millennial

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ABSTRACT
The rapid adoption of digital payment systems has transformed the financial landscape, particularly among millennials, who are at the forefront of this technological shift. This study explores the adoption and user behaviour of digital payment methods among millennials in India. The research aims to identify the key factors influencing the decision to use digital payments, including convenience, security, trust, and government initiatives. Additionally, it examines how socio-cultural influences, mobile payment applications, and peer networks impact the payment choices of this demographic. Through a survey of 250 millennials, the study reveals that ease of use, trust in security features, and promotional incentives are the primary drivers of digital payment adoption. It also identifies challenges such as concerns over data privacy and digital literacy. The findings suggest that while millennials are increasingly adopting digital payment systems, their behaviour is shaped by a complex interplay of technological, economic, and social factors. The study provides insights into strategies for improving the digital payment ecosystem and encourages further research into the evolving behaviour of young consumers.

1. Introduction

The rise of digital payment systems over the last decade has profoundly reshaped the global economy and transformed the way individuals interact with financial institutions. Among the key demographics leading this digital revolution are millennials, who have embraced digital payments at an unprecedented rate. This group, typically defined as those born between 1981 and 1996, represents one of the largest generational cohorts and is often characterized by their comfort with technology, preference for convenience, and openness to adopting innovative solutions. Millennials have played a pivotal role in driving the growth of digital payments, shifting the world towards a cashless economy and redefining consumer expectations around payments.

The adoption of digital payments by millennials is driven by several factors, ranging from convenience, speed, and security, to the desire for integrated and seamless experiences across their devices. Millennials have grown up alongside the rapid development of smartphones and mobile applications, which makes them particularly receptive to digital payment methods like mobile wallets, contactless cards, and app-based banking solutions. They are at the forefront of using platforms such as Google Pay, Apple Pay, PayPal, and various digital banking apps that facilitate instant payments. This demographic's familiarity with social media and digital ecosystems creates a natural affinity for digital financial tools that align with their lifestyle and preferences.

The behaviour of millennials with respect to digital payments is also shaped by their unique financial attitudes. Having witnessed significant economic shifts, such as the 2008 financial crisis and the ongoing transformations in the global job market, millennials often prioritize cost-effectiveness and value for money. Digital payments offer rewards, cashbacks, loyalty points, and other incentives that resonate with this generation. Moreover, with increasing financial awareness and a desire for greater control over personal finances, millennials tend to favor tools that offer transparency, track spending, and enable budgeting through integrated analytics.

Security and trust are critical considerations for millennials in adopting digital payments. Given their exposure to online scams and digital fraud, they place a high premium on security features such as biometric authentication, two-factor verification, and end-to-end encryption. Trustworthy platforms with stringent security measures and user-friendly interfaces enjoy widespread adoption among this group. Furthermore, their active engagement with social media often leads them to rely on peer recommendations, reviews, and ratings when choosing digital payment solutions, reinforcing, or hindering their adoption decisions.

Understanding the adoption and behaviours of millennials concerning digital payments is vital for stakeholders in the financial industry, including banks, fintech companies, and regulatory bodies. The preferences and usage

patterns of this demographic offer insights into future trends in financial technology. For instance, the growing inclination of millennials toward decentralized finance (DeFi) and blockchain-based payment solutions hints at the trajectory of the financial sector. Their demand for frictionless, cross-border transactions and digital payment interoperability has prompted financial institutions to innovate and enhance their service offerings.

The COVID-19 pandemic has further accelerated the adoption of digital payments by millennials as physical distancing measures and health concerns have driven people away from cash and toward contactless payment solutions. With an increasing reliance on e-commerce and digital services during this period, millennials have become even more integrated into digital payment ecosystems. As businesses and policymakers strive to keep pace with these changes, understanding millennial behaviours, preferences, and potential barriers to adoption is key to optimizing digital payment solutions.

The Rise of Millennials in Shaping Digital Payment Trends

Millennials, as the first generation to mature with the Internet, smartphones, and social media, have rapidly integrated digital solutions into their lives. This generation has driven the popularity of e-commerce, mobile banking, and digital payment platforms, pushing companies to innovate and enhance user experiences. Their high digital literacy and trust in technology-based solutions have shaped new norms and standards in the financial sector, influencing product development and consumer engagement strategies. The rise of millennials as primary users of digital payment platforms has encouraged traditional financial institutions and fintech startups to focus on convenience, security, and rewarding customer experiences

Statement of Problem

Digital payment has created a big impact in the customer behaviour. Earlier customers depend on cash for all transactions but now there is a change in the attitude of the customers. Customers started to switch over cashless transaction. Hence this unique study focusses on level of adoption of digital payments by the millennial and the challenges they face in adopting it.

Research Objectives:

The main objective of the study is

1.To explore level of adoption of digital payments among millennials

2. To Focus on the usage pattern of digital payment by millennials

3. To assess the factors that influence the adoption of digital payments.

2. Review of Literature

1. Sharma, P., & Verma, K. (2024) - In their study titled "Millennial behaviour Towards Digital Payments in Tier 2 Cities of India", Sharma and Verma explored factors driving digital payment adoption among millennials in smaller cities. They found that convenience, government incentives, and peer influence significantly shaped their attitudes towards digital transactions.

2.Reddy, N. K. (2023) - This research, "Impact of Digital Payment Systems on Millennial Consumer Behavior in South India", emphasized the role of mobile payment applications and their increasing influence. Reddy noted that ease of use, security concerns, and cashback offers had major impacts on millennial payment choices.

3.Gupta, A., & Singh, R. (2022) - Gupta and Singh's study titled "Trust and Security in Digital Payments: An Analysis of Millennial Users in India" focused on the perceived risks and trust factors associated with digital payment systems. The study revealed that trust in service providers and the availability of advanced security measures significantly contributed to the adoption behaviour of millennials.

4.Choudhury, S., & Nair, P. (2021) - "Adoption of Mobile Wallets by Indian Millennials: Patterns and Preferences" by Choudhury and Nair provided insights into the preference for mobile wallets. Their findings highlighted the importance of user-friendly interfaces, promotional rewards, and peer networks, which influenced millennial behavior towards mobile payments.

5.Rao, M. (2020) In "Adoption of Digital Payment Systems Among Urban Millennials: A Sociocultural Perspective", Rao examined the sociocultural factors impacting digital payment adoption among urban youth. His study underscored the influence of social media, cultural norms, and changing lifestyle patterns on their

behaviour towards digital payment systems.

6.Das, R., & Mehta, S. (2019) This research, "Perception and Challenges of Digital Payment Adoption by Indian Millennials", analysed both enablers and barriers for digital payment adoption. Das and Mehta pointed out key challenges such as data privacy concerns, lack of financial literacy, and service glitches as impediments to widespread adoption among young users.

7.Bhattacharya, L. (2018) Bhattacharya's work, "Factors Influencing the Acceptance of Digital Payment Platforms Among Indian Youth", provided a comprehensive view of the technological, economic, and psychological factors motivating millennials. His study highlighted how fast-changing technology and economic incentives drove the usage of digital payment platforms.

3. Research Methodology

The research methodology for the study on "Adoption and User behaviours of Digital Payment by Millennials" aims to explore the factors influencing millennials' adoption of digital payment systems. It will employ both qualitative and quantitative research approaches to gather insights into user behaviour patterns, preferences, and barriers to adoption. The study will use surveys and interviews with millennials to collect primary data and analyse the results through statistical and thematic analysis techniques.

1.Research Design

This study will follow a descriptive research design, as it aims to describe the patterns, behaviours, and factors influencing the adoption and usage of digital payment systems among millennials. It will provide a detailed analysis of how millennials engage with digital payment systems, their preferences, and barriers to adoption.

2. Data Collection Methods

To gather relevant data, both primary and secondary sources will be used:

Primary Data: Structured questionnaires will be administered to millennials (aged 18–35 years), focusing on their digital payment behaviours, preferences, perceptions, and barriers.

Secondary Data: Articles, reports, and studies on digital payments, millennial behaviours, and previous research in the area will be reviewed to provide contextual background and support the findings.

3. Sampling Method

Population: The target population will include millennials who have access to smartphones and are familiar with or use digital payment methods.

Sample Size: A sample of 250 millennials will be selected using simple random sampling to ensure a diverse representation of users across regions and socio-economic groups.

Sampling Technique: Simple random sampling will be employed to ensure different strata, such as age, gender, occupation, and geographical location, are adequately represented.

4. Data Collection Instrument

The primary data will be collected using a structured questionnaire designed to measure:

Demographic Information: Age, gender, income level, education, etc.

Adoption Factors: Ease of use, trust, security, peer influence, etc.

Behavioural Aspects: Frequency of usage, types of transactions, preferred platforms, and reasons for adoption.

Perceived Barriers: Security concerns, technological barriers, and lack of awareness.

Data analysis & Interpretation:

Table 1.1. Distribution of Demographic profile of the respondents

Variables	Parameter	Frequency	Percentage
Gender	Male	175	70
	Female	75	30
Age	Less than 25	63	25.2
	25 – 40 years	179	71.6

	More than 40 years	8	3.2
Occupation	Private Sector	92	36.8
	Public Sector	18	7.2
	Professional	98	39.2
	Self Employed	42	16.8
Monthly Income	Less than Rs.10000	25	10
	Rs.10000 to Rs.50000	68	27.2
	Rs.50000 to 100000	89	35.6
	Rs.100000 to Rs.500000	68	27.2

Source: Primary Data

It is inferred form table 1, that in terms of gender (N =175),70% are male and (N=75),30% of the respondents are female. Majority of the respondents belong to the age group of 25-40 years (N=179), 71.6%. From the table, it is observed that majority of the respondents have Monthly income of Rs,50000 to Rs.10000 which is 35.6%

Frame work of the study

This paper measures the level of adoption of digital payment by the customers of Chennai and the challenges that they face. From the various reviews analysed the following impacting factors were identified namely, “Ease of Use”, “Usefulness”, “Trust”, “Satisfaction” and “Security.”

Hypothesis of the study

1.H1: There is a significant relationship between Ease of Use and the adoption of Digital Payments among the customers

2.H2: There is a significant relationship between Usefulness and the adoption of digital payment by the customers

3.H3 : There exist a significant relationship between Trust and adoption of digital payments among the customers

4. H4: There exist a significant relation between satisfaction and adoption of digital payment among the customers

5.H5: Significant relationship exist between Security and adoption if digital payments by the customers.

6.H6: There is no significant relationship between demographic factors and the frequency in usage of the digital payments.

4. Result and Discussion

Table 1.2. Frequency and Percentage Analysis

Frequency in usage of digital payments	Frequency	Percentage
More than 10 times in a month	106	42.4
5 – 10 times in a month	87	34.8
Less than 5times in a month	57	22.8
Total	250	100.0
Source: Primary Data		

From table1. 2, it can be understood that majority of the millennials use digital payments frequently i.e added than 10 times in a month.(N=106), 42.4%. This group of people represents the backbone workforce and perform various financial transaction ranging from managing household expenses to investing for the future. Followed by the respondents 5 – 10 times (N=87),34.8%

Table 1.3. Preferred payment using digital payments

Expenses	Frequency	Percentage
Utility bill payments(Insurance, EB/ Water bills)	63	25.2
Travel booking (Train, bus, Flight Bookings)	36	14.4
Mobile recharge and payments	61	24.4
Movie ticket booking	17	6.8
Banking services	50	20
Hospitalisation and medical expenses	9	3.6
Food and other online purchases	14	5.6
Total	250	100.0

The data in table 3 reveals that the majority of users utilize digital payments predominantly for utility bill payments (25.2%), followed closely by mobile recharges and payments (24.4%). Banking services also hold a significant share at 20%. Travel bookings account for 14.4% of the usage, while movie ticket bookings and food and other online purchases make up smaller portions at 6.8% and 5.6% respectively. Hospitalization and medical expenses have the lowest usage at 3.6%. This suggests a high reliance on digital payments for essential and regular expenses, with lesser frequency for leisure and emergency-related transactions.

Table 1.4. Descriptive Statistics

Variables	No. of Items	Mean	SD	Cronbach Alpha
Ease of use	5	3.6	.675	.752
Usefulness	4	3.58	.836	.886
Satisfaction	4	3.31	.774	.735
Trust	4	3.62	.798	.881
Security	3	3.40	.670	.861
Adoption	6	2.83	.896	.830

The table 4 shows the descriptive statistics. The variables used are Ease of Use, Usefulness, Satisfaction, Trust, Security. It measures Mean, Standard Deviation. Cronbach Alpha test is used to measure the reliability of the of the constructs.

Table 1.5. Chi Square Test between Gender and Frequency of usage

Variables	Parameter	Frequency of usage in a month						Total	
		More than 10 times		5-10 times		Less than 5 times			
Gender	Male	81	32.4%	52	20.8%	42	16.8%	175	70%
	Female	25	10%	35	14%	15	6%	75	30%
	Total	106	42.4%	87	34.8%	57	22.8%	250	100%
χ 2 = 6.78; p-value = .034									

It is inferred from the table 1.5, that there is a significant difference (χ 2 = 6.78; p-value <0.05) exist between Male and Female customers. It reveals that male adopt digital payment more than the female customers.

Table 1.6. Chi Square Test between Age and Frequency of usage

Variables	Parameter	Frequency of usage in a month						Total	
		More than 10 times		5-10 times		Less than 5 times			
Age Group	Less than 25	28	11.2%	26	10.4%	9	3.6%	63	25.2%
	25 – 40 years	73	29.2%	60	24.0%	46	18.4%	179	71.6%
	More than 40 years	5	20%	1	.4%	2	.8%	8	3.2%
	Total	106	42.4%	87	34.8%	57	22.8%	250	100%
χ 2 = 5.657; p-value = .210									

It is clear from the table 1.6, there is no significant difference (χ 2 = 5.657; p-value >0.05) among the respondents in the age in adopting the digital payments.

Table 1.7. Chi Square Test between Occupation and Frequency of usage

Variables	Parameter	Frequency of usage in a month						Total	
		More than 10 times		5-10 times		Less than 5 times			
Occupation	Private Sector	43	17.2%	27	10.8%	22	8.8%	92	36.8%
	Public Sector	6	2.4%	9	3.6%	3	1.2%	18	7.2%
	Professional	48	19.2%	28	11.2%	22	8.8%	98	39.2%
	Self Employed	9	3.6%	23	9.2%	10	40%	42	16.8%
	Total	106	42.4%	87	34.8%	57	22.8%	250	100%
χ 2 = 14.277; p-value = .024									

From table 1.5, It is noted that there is significant difference (χ 2 = 14.277; p-value <0.05) among the respondents based on the occupation in adopting digital payments.

Table 1.8. Chi Square Test between Monthly Income and frequency of usage

Variables	Parameter	Frequency of usage in a month						Total	
		More than 10 times		5-10 times		Less than 5 times			
Monthly Income		10	4%	7	2.8%	8	3.2%	25	10%
	Rs.10000 to Rs.50000	28	11.2%	30	12.4%	10	4%	68	27.2%
	Rs.50000 to 100000	37	14.8%	31	12.4%	21	8.4%	89	35.6%
	Rs.100000 to Rs.500000	31	12.4%	19	7.6%	18	7.2%	68	27.2%

	Total	106	42.4%	87	34.8%	57	22.8%	250	100%
χ 2 = 11.080; p-value = .197									

Table 1.8, shows that there is no difference (χ 2 = 11.080; p-value >0.05) among the respondents based on the monthly income in adopting the digital payments.

Table 1.9. Coefficients

Variables	Unstandardised Coefficient		Standardised Coefficient	t – Value	Sig.		
	B	Std. Error	Beta			Tolerance	VIF
Constants	1.330	.319		4.166	.000	-	-
Ease of use	-130	.110	-.099	-1.192	.235	.497	2.013
Usefulness	.190	.093	.176	2.030	.043*	.456	2.191
Satisfaction	.425	.095	.369	4.488	.000**	.506	1.975
Trust	-115	.104	-.101	-1.084	.280	.397	2.521
Security	.085	.103	.065	.841	.401	.576	1.736

The table 1.9 indicates the β value of the variables. Satisfaction (β=.369) shows that it has a significant impact on the adoption of digital payments. Similarly Usefulness (β=.176) also has an impact on adoption. Ease of use and Trust has a negative impact on adoption. Security (.065) has no significant impact.

t- value indicate the impact of each independent variable on the dependent variable. It is inferred from the table 5 that satisfaction (4.488) has the highest impact followed by usefulness (2.030).

5. Major Findings

From table 1.9, It can be inferred that

Hypothesis 1: There is a significant relationship between Ease of Use and the adoption of Digital Payments among the customers is rejected. (P value >0.05)

Hypothesis 2: There is a significant relationship between Usefulness and the adoption of digital payment by the customers is accepted (P value <0.05)

Hypothesis 3: There exists a significant relationship between Trust and adoption of digital payments among the customers is rejected (P value >0.05)

Hypothesis 4: There exists a significant relation between satisfaction and adoption of digital payment among the customers is accepted (P value <0.05)

Hypothesis 5: Significant relationship exists between Security and adoption if digital payments by the customers is rejected (P value >0.05)

Hypothesis 6: There is no significant relationship between demographic factors and the frequency in usage of the digital payments

Based on the Chi Square test, result of the (table 1.5,1.6,1.7, and 1.8) there is no relationship between demographic factors in adoption of digital payment system, hence null hypothesis is accepted but it is rejected for the factors gender and occupation as the p value is less than 0.05.

6. Conclusion

The study was conducted with 250 randomly chosen bank customers in Chennai. Majority of the respondents are male (70.0%) age group between 25-40 Years (71.6%) and their continuing earnings lies among Rs.50000 to Rs.100000. (35.6%). It is found that there is a positive sign in adopting the digital payments. Nearly 42.4% of the respondents use digital payments more than 10 times in a month for paying their utility bills. The study also observes that Usefulness and Satisfaction enable them to adopt digital payments. The study also points out that millennial consumers adopt digital payment, use more for making utility payments and are satisfied in using the digital payments.

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