



“DIGITAL PAYMENT SYSTEM IN INDIA: TREND AND STRUCTURAL CHANGES AFTER DEMONETIZATION”

Ms. Vibha Nagendra (M.Com)* Dr. Sandesh Ramakanth Bhat*

**Malleshwaram Ladies' Association – Academy of Higher Learning, 14th Cross, Malleshwaram, Bengaluru .*

Abstract

India's financial landscape underwent a dramatic change with the introduction of the demonetization policy in 2016, which sparked a major move toward digital payment methods. This study aims to investigate the patterns and structural alterations in India's digital payment ecosystem subsequent to the demonetization drive. The research aims to provide insights into the changing dynamics of the digital payment system and its implications for the Indian economy through a thorough analysis of adoption patterns, technological advancements, policy implications, and changes in consumer behaviour.

Utilizing quantitative approaches, data is gathered from through surveys. The study also explores how industry best practices, government initiatives, and regulatory frameworks are influencing India's digital payment landscape.

The study's conclusions show that consumers are adopting digital payment methods at a rapid pace, depending more and more on mobile wallets, Unified Payments Interface (UPI), and other electronic payment solutions for everyday transactions.

Key Words: *Demonetization, Digital Payment, Qualitative Data, Survey through Questionnaire.*

Introduction

The development of digital payment methods has played a key role in India's revolutionary shift to a technologically advanced, inclusive economy. The financial landscape in India underwent a paradigm shift with the unprecedented demonetization policy that was put into effect in November 2016. This led to a rapid acceleration of the adoption of digital payment methods throughout the nation.

Following the demonetization process, there was a notable increase in the utilization of digital platforms, including internet banking, mobile wallets, Unified Payments Interface (UPI), and other electronic payment options. This led to the development of a cashless economy and elevated India to the forefront of the global digital payment revolution.

The objective of this research is to conduct a thorough analysis of the developing patterns and systemic adjustments in India's digital payment environment following the implementation of the demonetization program. Through an examination of the various facets of this ever-changing landscape, such as the effects on consumer behaviour, technological developments, legal frameworks, and governmental initiatives.

Review Literature:

Khan, F. Z. D. F. S. Recent Trends in Digital Payment: A Review. Redefining Business Models for Sustainable Development, 40: An examination of the most recent technical developments in digital payment solutions, including blockchain technology, contactless payments, mobile wallets, and other breakthroughs that have changed the nature of digital transactions. examination of current patterns in



consumer behaviour and adoption of digital payment methods, taking into account aspects like user-friendliness, security, trust, and convenience within the digital payment ecosystem. **Nathani, S., Chakhiyar, N., & Pandey, S. K. (2022). A Study on Consumers Perception towards Digital Payment System in India and Various Affecting Its Growth. Issue 3 Int'l JL Mgmt. & Human., 5, 1162:** A thorough analysis of the body of research on the various digital payment systems available in India, such as internet banking, mobile wallets, Unified Payments Interface (UPI), and other electronic payment techniques. Consumer views, attitudes, and preferences regarding digital payment systems are analysed, with an emphasis on user experience, convenience, security, trust, and perceived risks related to digital transactions. **Singh, M. O. H. I. N. D. E. R. (2022). Digital Payment Systems in India: Trend and Structural Changes after Demonetisation. Finance India, 36(3), 953-970:** An in-depth analysis of how digital payment systems have developed in India, taking into account the introduction of new platforms, technologies, and infrastructure advancements that have aided in the country's shift toward a more cashless economy. Examining user preferences, trust, convenience, security concerns, and other factors that affect the uptake and use of digital payment platforms, this study examines trends in consumer adoption and behaviour with regard to these systems. **Kumar, P., & Chaubey, D. S. (2017). Demonetization and its impact on the adoption of digital payments: opportunities, issues, and challenges Abhinav National Monthly Refereed Journal of Research in Commerce & Management, 6(6), 15:** Identification and examination of the main problems and obstacles encountered during the shift, such as issues with cybersecurity, the constraints of the infrastructure, technological preparedness, and the digital divide between the urban and rural populations.

Research Methodology

1. **Sources of data:** Primary data is used in this study, and additionally secondary data used from existing literature.
2. **Sampling procedure:** Questionnaire was designed to capture the information related to the digital payment system in India. I got 123 responses from the questionnaire.

Objectives of the Study

1. To compare the uptake of digital payment systems in India before and after the demonetization program, looking at changes in customer preferences and behaviour.
2. To evaluate how demonetization has affected the development of several digital payment systems, including internet banking, mobile wallets, Unified Payments Interface (UPI), and other electronic payment methods.
3. To look into the characteristics that affect the adoption of digital payment systems in India across various demographic groups, taking into account things like age, income level, education, and geography.
4. To investigate, taking into account worries about cyber security and fraud protection, how Indian businesses and customers see the security, dependability, and convenience of digital payment systems in the post-demonetization period.

Scope of the Study

1. Understanding the post-demonetization era's patterns and structural changes can help determine how much the policy has influenced the uptake and development of digital payment systems.
2. Determining the factors driving the broad adoption of digital payment methods requires analysing the changes in consumer behaviour and preferences. The causes and obstacles to



India's adoption of digital transactions can be found by evaluating the shifts in customer attitudes and usage patterns.

- Evaluating technology advancements can highlight the strengths and weaknesses of the ecosystem surrounding digital payments.

Data Analysis & Interpretation

Table 01: Which application do you prefer for digital payment

Chi-Square Tests			
	Value	df	Asymptotic Significance (2-sided)
Pearson Chi-Square	11.453 ^a	10	.323
Likelihood Ratio	15.527	10	.114
Linear-by-Linear Association	.349	1	.555
N of Valid Cases	123		

a. 12 cells (66.7%) have expected count less than 5. The minimum expected count is .01.

This interpretation shows the preferred application for digital payment made by the respondents according to the gender.

Table 02: Which application do you prefer for digital payment

Chi-Square Tests			
	Value	df	Asymptotic Significance (2-sided)
Pearson Chi-Square	20.596 ^a	15	.150
Likelihood Ratio	23.629	15	.072
Linear-by-Linear Association	1.335	1	.248
N of Valid Cases	123		

a. 17 cells (70.8%) have expected count less than 5. The minimum expected count is .05.

This interpretation shows the preferred application for digital payment made by the respondents according to their age.

Table 03: Which application do you prefer for digital payment

Chi-Square Tests			
	Value	df	Asymptotic Significance (2-sided)
Pearson Chi-Square	13.343 ^a	10	.205
Likelihood Ratio	13.335	10	.206
Linear-by-Linear Association	.012	1	.913
N of Valid Cases	123		

a. 11 cells (61.1%) have expected count less than 5. The minimum expected count is .10.

This interpretation shows the preferred application for digital payment made by the respondents according to their education.



Table 04: Which application do you prefer for digital payment

Chi-Square Tests			
	Value	df	Asymptotic Significance (2-sided)
Pearson Chi-Square	27.647 ^a	15	.024
Likelihood Ratio	23.387	15	.076
Linear-by-Linear Association	1.794	1	.180
N of Valid Cases	117		

a. 19 cells (79.2%) have expected count less than 5. The minimum expected count is .08.

This interpretation shows the preferred application for digital payment made by the respondents according to their occupation.

Table 05: Do you feel safe while using digital payment system

Chi-Square Tests			
	Value	df	Asymptotic Significance (2-sided)
Pearson Chi-Square	21.929 ^a	8	.005
Likelihood Ratio	19.044	8	.015
Linear-by-Linear Association	7.938	1	.005
N of Valid Cases	123		

a. 6 cells (40.0%) have expected count less than 5. The minimum expected count is .09.

This interpretation shows whether the respondents feel safe while using the digital payment system according to the gender.

Table 06: Do you feel safe while using digital payment system

Chi-Square Tests			
	Value	df	Asymptotic Significance (2-sided)
Pearson Chi-Square	13.332 ^a	12	.345
Likelihood Ratio	13.923	12	.306
Linear-by-Linear Association	5.137	1	.023
N of Valid Cases	123		

a. 12 cells (60.0%) have expected count less than 5. The minimum expected count is .54.

This interpretation shows whether the respondents feel safe while using the digital payment system according to their age.



Table 07: Do you feel safe while using digital payment system

Chi-Square Tests			
	Value	df	Asymptotic Significance (2-sided)
Pearson Chi-Square	6.833 ^a	8	.555
Likelihood Ratio	8.359	8	.399
Linear-by-Linear Association	.235	1	.628
N of Valid Cases	123		

a. 7 cells (46.7%) have expected count less than 5. The minimum expected count is 1.07.

This interpretation shows whether the respondents feel safe while using the digital payment system according to their education.

Table 08: Do you feel safe while using digital payment system

Chi-Square Tests			
	Value	df	Asymptotic Significance (2-sided)
Pearson Chi-Square	11.666 ^a	12	.473
Likelihood Ratio	12.911	12	.376
Linear-by-Linear Association	1.024	1	.312
N of Valid Cases	117		

a. 11 cells (55.0%) have expected count less than 5. The minimum expected count is .85.

This interpretation shows whether the respondents feel safe while using the digital payment system according to their occupation.

Table 09: What is your preferred mode of digital payment

Chi-Square Tests			
	Value	df	Asymptotic Significance (2-sided)
Pearson Chi-Square	12.978 ^a	14	.528
Likelihood Ratio	10.552	14	.721
Linear-by-Linear Association	.000	1	.984
N of Valid Cases	123		

a. 16 cells (66.7%) have expected count less than 5. The minimum expected count is .01.

This interpretation shows the respondents preferred mode of payment according to the gender.



Table 10: What is your preferred mode of digital payment

Chi-Square Tests			
	Value	df	Asymptotic Significance (2-sided)
Pearson Chi-Square	26.601 ^a	21	.184
Likelihood Ratio	23.944	21	.296
Linear-by-Linear Association	.006	1	.940
N of Valid Cases	123		

a. 24 cells (75.0%) have expected count less than 5. The minimum expected count is .05.

This interpretation shows the respondents preferred mode of payment according to their age.

Table 11: What is your preferred mode of digital payment

Chi-Square Tests			
	Value	df	Asymptotic Significance (2-sided)
Pearson Chi-Square	11.635 ^a	14	.636
Likelihood Ratio	14.653	14	.402
Linear-by-Linear Association	.007	1	.932
N of Valid Cases	123		

a. 17 cells (70.8%) have expected count less than 5. The minimum expected count is .10.

This interpretation shows the respondents preferred mode of payment according to their education.

Table 12: What is your preferred mode of digital payment

Chi-Square Tests			
	Value	df	Asymptotic Significance (2-sided)
Pearson Chi-Square	17.372 ^a	21	.688
Likelihood Ratio	19.564	21	.549
Linear-by-Linear Association	.038	1	.846
N of Valid Cases	117		

a. 25 cells (78.1%) have expected count less than 5. The minimum expected count is .08.

This interpretation shows the respondents preferred mode of payment according to their occupation.



Table 13: Did you shift to digital transaction after demonetization

Chi-Square Tests			
	Value	df	Asymptotic Significance (2-sided)
Pearson Chi-Square	9.838 ^a	8	.277
Likelihood Ratio	8.687	8	.369
Linear-by-Linear Association	1.977	1	.160
N of Valid Cases	123		
a. 5 cells (33.3%) have expected count less than 5. The minimum expected count is .11.			

This interpretation shows whether the respondents shifted to digital transaction after demonetization according to the gender.

Table 14: Did you shift to digital transaction after demonetization

Chi-Square Tests			
	Value	df	Asymptotic Significance (2-sided)
Pearson Chi-Square	17.592 ^a	12	.129
Likelihood Ratio	18.398	12	.104
Linear-by-Linear Association	.137	1	.711
N of Valid Cases	123		
a. 11 cells (55.0%) have expected count less than 5. The minimum expected count is .68.			

This interpretation shows whether the respondents shifted to digital transaction after demonetization according to their age.

Table 15: Did you shift to digital transaction after demonetization

Chi-Square Tests			
	Value	df	Asymptotic Significance (2-sided)
Pearson Chi-Square	5.046 ^a	8	.753
Likelihood Ratio	6.286	8	.615
Linear-by-Linear Association	1.186	1	.276
N of Valid Cases	123		
a. 8 cells (53.3%) have expected count less than 5. The minimum expected count is 1.37.			

This interpretation shows whether the respondents shifted to digital transaction after demonetization according to their education.



Table 16: Did you shift to digital transaction after demonetization

Chi-Square Tests			
	Value	df	Asymptotic Significance (2-sided)
Pearson Chi-Square	15.867 ^a	12	.197
Likelihood Ratio	17.123	12	.145
Linear-by-Linear Association	.007	1	.932
N of Valid Cases	117		

a. 11 cells (55.0%) have expected count less than 5. The minimum expected count is 1.00.

This interpretation shows whether the respondents shifted to digital transaction after demonetization according to their occupation.

Table 17: Will you use digital payment if notes are introduced again

Chi-Square Tests			
	Value	df	Asymptotic Significance (2-sided)
Pearson Chi-Square	15.097 ^a	8	.057
Likelihood Ratio	13.444	8	.097
Linear-by-Linear Association	4.134	1	.042
N of Valid Cases	123		

a. 6 cells (40.0%) have expected count less than 5. The minimum expected count is .10.

This interpretation shows whether the respondents will use digital payment if notes are introduced again according to the gender.

Table 18: Will you use digital payment if notes are introduced again

Chi-Square Tests			
	Value	df	Asymptotic Significance (2-sided)
Pearson Chi-Square	26.962 ^a	12	.008
Likelihood Ratio	27.685	12	.006
Linear-by-Linear Association	8.422	1	.004
N of Valid Cases	123		

a. 11 cells (55.0%) have expected count less than 5. The minimum expected count is .59.

This interpretation shows whether the respondents will use digital payment if notes are introduced again according to their age.



Table 19: Will you use digital payment if notes are introduced again

Chi-Square Tests			
	Value	df	Asymptotic Significance (2-sided)
Pearson Chi-Square	5.224 ^a	8	.733
Likelihood Ratio	7.027	8	.534
Linear-by-Linear Association	.910	1	.340
N of Valid Cases	123		

a. 8 cells (53.3%) have expected count less than 5. The minimum expected count is 1.17.

This interpretation shows whether the respondents will use digital payment if notes are introduced again according to the education.

Table 20: Will you use digital payment if notes are introduced again

Chi-Square Tests			
	Value	df	Asymptotic Significance (2-sided)
Pearson Chi-Square	19.887 ^a	12	.069
Likelihood Ratio	24.065	12	.020
Linear-by-Linear Association	8.421	1	.004
N of Valid Cases	117		

a. 11 cells (55.0%) have expected count less than 5. The minimum expected count is .92.

This interpretation shows whether the respondents will use digital payment if notes are introduced again according to the occupation.

Table 21: Did your spending behaviour change after digital payment

Chi-Square Tests			
	Value	df	Asymptotic Significance (2-sided)
Pearson Chi-Square	5.064 ^a	8	.751
Likelihood Ratio	3.742	8	.880
Linear-by-Linear Association	.146	1	.702
N of Valid Cases	123		

a. 5 cells (33.3%) have expected count less than 5. The minimum expected count is .11.



This interpretation shows whether the respondents spending behaviour changed after the digital payment was introduced according to the gender.

Table 22: Did your spending behaviour change after digital payment

Chi-Square Tests			
	Value	df	Asymptotic Significance (2-sided)
Pearson Chi-Square	13.228 ^a	12	.353
Likelihood Ratio	14.462	12	.272
Linear-by-Linear Association	.087	1	.769
N of Valid Cases	123		

a. 10 cells (50.0%) have expected count less than 5. The minimum expected count is .68.

This interpretation shows whether the respondents spending behaviour changed after the digital payment was introduced according to their age.

Table 23: Did your spending behaviour change after digital payment

Chi-Square Tests			
	Value	df	Asymptotic Significance (2-sided)
Pearson Chi-Square	2.334 ^a	8	.969
Likelihood Ratio	2.336	8	.969
Linear-by-Linear Association	.015	1	.902
N of Valid Cases	123		

a. 8 cells (53.3%) have expected count less than 5. The minimum expected count is 1.37.

This interpretation shows whether the respondents spending behaviour changed after the digital payment was introduced according to the education.

Table 24: Did your spending behaviour change after digital payment

Chi-Square Tests			
	Value	df	Asymptotic Significance (2-sided)
Pearson Chi-Square	14.324 ^a	12	.281
Likelihood Ratio	17.329	12	.138
Linear-by-Linear Association	.001	1	.980
N of Valid Cases	117		

a. 11 cells (55.0%) have expected count less than 5. The minimum expected count is 1.00.

This interpretation shows whether the respondents spending behaviour changed after the digital payment was introduced according to their occupation.



Conclusion

The study's conclusions highlight the profound effects of demonetization on India's digital payment environment and the revolutionary shifts that have completely changed the nation's financial system. A significant shift in consumer behaviour was found in the adoption trends investigation, with a noticeable rise in the use of digital payment methods across a range of demographic groupings, including internet banking, mobile wallets, and Unified Payments Interface (UPI).

Although there has been progress, the study also found a number of obstacles that still need to be overcome before digital payment methods can be widely adopted. These obstacles include worries about cyber security, digital literacy, and accessibility in remote locations.

Findings

1. The survey discovered a notable upsurge in the use of digital payment systems, with mobile wallets and the Unified Payments Interface (UPI) being used for a wider range of transactions by various demographic groups.
2. According to the survey, after demonetization, consumer trust and perception of digital payment systems had greatly increased, and customers were beginning to appreciate the ease, speed, and security that these platforms provided.

Suggestions

1. Prioritizing and bolstering cyber security measures is necessary in light of the increasing dependence on digital payment systems to protect user data and financial transactions from fraud and cyber threats.
2. Investing in programs that increase the digital literacy of the populace—especially in rural areas—is necessary to encourage wider adoption and guarantee that all societal segments are able to use digital payment systems.

Journals Referred

1. Khan, F. Z. D. F. S. Recent Trends in Digital Payment: A Review. Redefining Business Models for Sustainable Development.
2. Nathani, S., Chakhiyar, N., & Pandey, S. K. (2022). A Study on Consumers Perception towards Digital Payment System in India and Various Affecting Its Growth. Issue 3 Int'l JL Mgmt. & Human.
3. Singh, M. O. H. I. N. D. E. R. (2022). Digital Payment Systems in India: Trend and Structural Changes after Demonetisation. Finance India.
4. Kumar, P., & Chaubey, D. S. (2017). Demonetization and its impact on the adoption of digital payments: opportunities, issues, and challenges Abhinav National Monthly Refereed Journal of Research in Commerce & Management, 6(6), 15.