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The Cashless Economy and Financial Inclusion in India in the Digital Age

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Abstract

Purpose: Cash has been flowing like water in the Indian economy for decades, and it has suddenly become irreplaceable. India is gradually moving away from cash transactions, with digitalization playing a crucial role. However, when it comes to financial inclusion, it is far from sufficient. On the one hand, current digital financial infrastructure is well suited to affluent or middle-income households because it makes money transfer inexpensive, convenient, and time-consuming. On the other side, we see that poor people are more compatible with cash and tangible products, with digital illiteracy and lack of confidence playing a crucial role. In this modern age of digitalization and cashless transfers, financial inclusion is thus in threat, until we do the inclusion of poor and rich on the ground of digital literacy. Financial inclusion is thus threatened in this current age of digitization and cashless transfers, unless poor and rich people are included on the basis of digital literacy.

Design/ methodology/ approach: The study places a strong emphasis on both primary and secondary data. To collect primary data, a questionnaire approach was used. The sample size is 246, and it comes from the Delhi National Capital Region (NCR), which encompasses Delhi as well as districts in Haryana, Uttar Pradesh, and Rajasthan.

Research objective and implications: The study's main goal is to look into the state of financial inclusion and people's willingness to open bank accounts for various purposes, as well as to investigate the effects of transaction-related factors on cashless payments in India, such as convenience, security, expenses, incentive schemes, and procedures, as well as to look into technological issues in cashless payments.

This paper will assist regulators, researchers, government officials, and other stakeholders in society in understanding the implications of new technologies for India's cashless economy and financial inclusion.

Keywords:

Cashless Economy, Financial Inclusion, Digital Financial Infrastructure, Digitalization.

Introduction:

Cash is flowing like water in the Indian economy for decades, it's irreplaceable at a sudden. gradually India is shifting towards cashless transactions and digitalization is playing the role of a key. Demonetization move in November 2016 as well as the ongoing steer by the govt and regulatory agencies for a cashless economy have accelerated the economic expansion curve. The Indian digital payments market is anticipating a compound annual growth rate (CAGR) of 22% from 2019 to 2024 (INR1,638.49 trillion to INR4,323.63 trillion) (kpmg report,2020)

Adoption of digital payments is now widespread in India. In total, one-third of Indian households use it in some form or another. It's encouraging to see that nearly a quarter of families in the bottom 40% of income bracket use it as well, proving that it's no longer just for the wealthy or well-educated. (NPCI Report, 2020) In 2019-20, the proportion of online transactions in the total volume of non-cash payment systems increased to 97.0 percent, up from 95.4 percent the previous year. Nonetheless, the continuous lockdown triggered by the COVID-19 disease outbreak resulted in constrained economic growth and lower voluntary transactions, leading to a decline in online transactions. (Reserve Bank of India - Annual Report, 2021)

The concept of a cashless economy is admirable in and of itself, but all of these challenges and possible threats must be considered. Transactions that are required to carry out without the exchange of physical cash are advantageous in terms of regulating and controlling the flow of currency.

Literature Review:

1. **Waseem (2018):** Cashless or electronic transactions invariably result in an automated clarification that benefits both the user (Consumer) as well as the cost gatherer (govt). Cashless exchange is a time saver when it comes to managing costs. The government should also work to improve the general infrastructure so that an anybody ever large number of people can join the money-keeping internet and otherwise web.
2. **Gourab and Nishant (2020):** Online banking has the power to drastically alter the terrain of financially excluded economic interconnection into the spotlight. Financial institutions are capable of reaching out to more clients by offering quality services in support of emerging technologies. It is preferable for all sections of society to really be familiar with electronic financial products and use them, as it is beneficial to both environment and economy.
3. **Bappaditya (2016):** This study identifies some of the direct and indirect benefits of going cashless for India, including lower currency maintenance costs, financial recording and effective tax collection systems, financial inclusion, and preventing fund leakages. Just 27% of Public Distribution System funding met the intended low-income groups, according to the Planning Commission in 2009.
4. **R. Pradheep and T Vijayakumar (2018):** Excellent UPIs, mobile banking, and online payments with more focused features, ease of transactions, and lower costs of working with payments via online format could lead to more possible developments and help in improved states of

computerised instalments preparation in small towns. It is crucial to raise insight and understanding in country places more about importance of cashless transactions.

5. **R. Mohan (2019):** Digitalisation fosters innovation, ease of operation, new job opportunities, and economic growth. It contributes to system transparency and a lot of clear area unit the flow of funds within the economy, which reduces the downside of non-payment, parallel economy, and so on. Digitalization also plays an important role in achieving this goal because it allows for a greater reach to the people. The new technology must be well controlled, and this includes not only the provision of it, but also the information on how to use it and gain benefits from it.
6. **Kusuma and Seshadripuram (2020):** Despite being one of the world's fastest emerging economy India lags behind in the adoption of digitalization in the financial sector. however, some significant steps must be taken to digitalize rural banking. Even after the application of the Jan Dhan Yojna by the government, 19 percent of the people remains unbanked. Digitalization plays a significant role in creating and delivering value to those areas where financial inclusion is lacking.
7. **Raja and Sabyasachi (2020):** By embracing digitalization, India has created a new form in cash transactions. It made life easier, less hectic, and less complex. The government's demonetization provided it with the necessary impetus. Digitalization is often viewed as a two-edged sword. it makes life easier by liberating us from all the time-consuming and often complex traditional methods of money transfer, on one hand but on the other, it manifests itself into a devil through multiple internet scams and fraudulent activities that have led to people losing their entire savings in the hands of the people with violent intent.
8. **Rajat (2020):** When everyone comes together under one roof, the cashless concept can work. Some people in India are well educated, while others rely on their thumbs. To make the idea of a cashless economy a reality in India, the Centre, states, and local governments must work hard to ensure that first and foremost, everyone is financially included in the norm. Second, there must be a transaction option. Second, there must be the option to conduct transactions digitally. Third, the security and safety of cashless transactions must be ensured.

Objective:

The study's overarching purpose is to examine public's view of cashless transactions in The country. following are the specific objectives of this study:

1. To study the status of financial inclusion and people's inclination towards opening bank account for various purpose.
2. To explore the effects of factors related to transaction on cashless payments in India, such as convenience, security, expenses, incentive schemes, and procedures.
3. To analyse the impact of technological issues such as lack internet accessibility and defective POS devices on cashless payments in India.
4. To investigate the impact of user-oriented factors like lack of technical awareness among users, and a consumer's unwillingness to reveal financial data on cashless payments in India.

Research Methodology:

The study emphasis on primary and secondary information. The questionnaire approach was used to gather primary data. The questionnaire was designed relying' on the research participants prior experience and an analysis of relevant literature upon the subject matter.

The sample size is 246, and it is drawn from the Delhi National Capital Region (NCR) of Delhi, which includes Delhi as well as several districts in the states of Haryana, Uttar Pradesh, and Rajasthan.

For the primary data collection, the questionnaire was personally transmitted via an online form — Google doc. Social media platforms have proven to be an effective way of connecting to Various users in Delhi NCR region. The questionnaire contains a total of seventeen questions, six of which are

related to the respondent's profile. The remaining eleven questions use a five-point Likert scale. The stratified random sampling technique is used to select sample respondents. There are 246 correct responses that are statistically significant. Calculating percentages is used to analyse the collected data. The Chi-square test is used in SPSS to test hypotheses.

Analysis and Findings:

1. Status of Financial Inclusion:

Table 1.1: Age of the Respondents

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Below 25 years	18	7.3	7.3	7.3
	Between 26-35	92	37.4	37.4	44.7
	Between 36-45	94	38.2	38.2	82.9
	Between 46-55	36	14.6	14.6	97.6
	Above 55	6	2.4	2.4	100.0
	Total	246	100.0	100.0	

Out of 246 respondents, maximum respondents belong to the age group of 26-35 and 36-45 years that is of ~38%, whereas 14.6% belongs to age group of 46-55 years, 7.3% are from age group below 25 years, and remaining (2.4%) are above 55 years.

Table 1.2: Education Level of the Respondents

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Matrix	15	6.1	6.1	6.1
	Intermediate	67	27.2	27.2	33.3
	Graduate	75	30.5	30.5	63.8
	Post graduate	52	21.1	21.1	85.0
	Doctorate	37	15.0	15.0	100.0
	Total	246	100.0	100.0	

From the surveyed sample, 30.5% are graduate, 27.2% studied up to intermediate, 21.1% are post graduate, 15.0% are doctorate and remaining (6.1%) are just matrix passed.

Table 1.3: Income of the respondents

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Below Rs 15,000	15	6.1	6.1	6.1
	Between Rs 16, 000- 30,000	85	34.6	34.6	40.7
	Between Rs 31,000- 50,000	97	39.4	39.4	80.1
	Between Rs 51,000- 70,000	38	15.4	15.4	95.5
	Above 70,000	11	4.5	4.5	100.0
	Total	246	100.0	100.0	

The statistics of respondents indicate that maximum respondents that is 39.4% belongs to the income range Rs 31,000-50,000, following by 34.6% respondents who has income between Rs 16,000-30,000, 15.4% has income between Rs 51,000-70,000, 6.1% of respondents are below Rs 15,000 income category, where as 4.5% respondents are receiving income above Rs 70,000.

Table 1.4: Type of account Respondents have

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Saving bank, a/c	131	53.3	53.3	53.3
	Current a/c	40	16.3	16.3	69.5
	Recurring deposit a/c	32	13.0	13.0	82.5
	Fixed Deposit a/c	37	15.0	15.0	97.6
	Other	6	2.4	2.4	100.0
	Total	246	100.0	100.0	

The Table 4 indicates that maximum respondents that is 53.3% have saving account, followed by 16.3% that have current a/c, 15% and 13% that have Fixed Deposit a/c and Recurring Deposit a/c respectively.

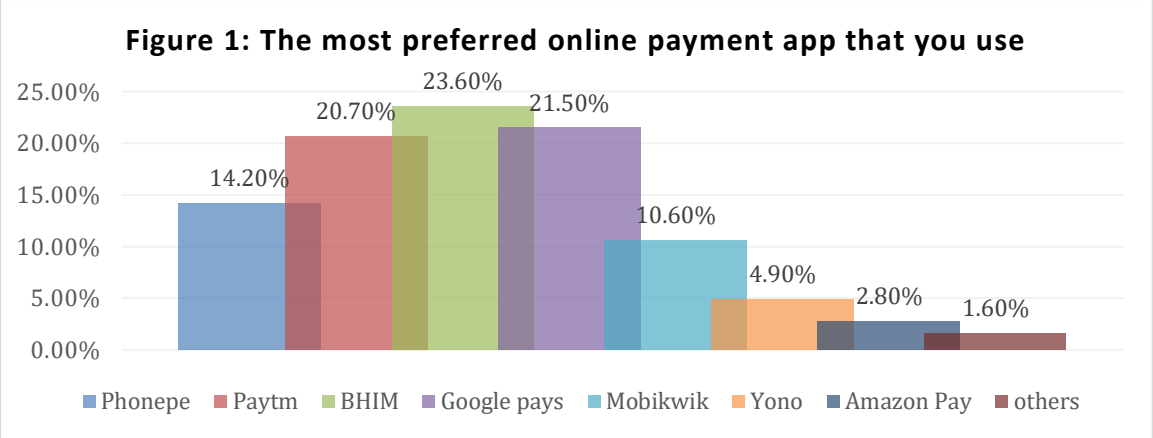
Table 1.5: Purpose of opening the bank account

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	To Receive Government Payment Under Various Schemes	16	6.5	6.5	6.5
	For Receiving Remittances	29	11.8	11.8	18.3
	For saving money	159	64.6	64.6	82.9
	To request a loan	36	14.6	14.6	97.6
	Other	6	2.4	2.4	100.0
	Total	246	100.0	100.0	

Table 5 shows that the purpose of opening a bank account for maximum respondents that is 64.6% is saving money, while 14.6% respondents opened account for requesting bank loan, 11.8% for receiving remittances and 6.5% to receive government payment under various schemes.

Table 1.6: The most preferred online payment app that Respondents use

	Phonepe	Paytm	BHIM	Google pays	Mobikwik	Yono	Amazon Pay	others
The most preferred online payment app that you use	14.20%	20.70%	23.60%	21.50%	10.60%	4.90%	2.80%	1.60%



The bar chart (Figure 1) shows that the most preferable mode of online payment of the sample is BHIM app that is 23.60%, followed by Google Pay (21.05%), Paytm (20.70%), Phonepe (14.20%), Mobiwik (10.60%), Yono (4.90%) and Amazon pay (2.80%).

2. Percieved prospects and challenges of cashless transaction:

The questions (7-18) are based on five-point Likert Scale statements ranging from "Strongly Disagree" to "Strongly Agree" and are used to assess the degree of perceived prospects and challenges of Cashless transactions.

The words "strongly agree" and "agree" are combined to form the positive answer "agree." In the case of "Strongly Disagree" and "Disagree," the same approach is used, and the two responses are combined to yield one answer from the survey respondents: "Disagree." "Neutral" has been kept in middle. The data was compiled using SPSS frequency distribution Output table.

The five-point Likert scale is considered an interval scale. The mean is very significant. From 1 to 1.8, it means strongly disagree. From 1.81 to 2.60, it means disagree. From 2.61 to 3.40, it means neutral; from 3.41 to 4.20, it means agree; from 4.21 to 5, it means strongly agree.

Table 2.1(A): **Convenience in Transaction is the Reason for Cashless Payments in India**

	SD (1) %	D (2) %	Total (1+2) %	N (3) %	A (4) %	SA (5%)	Total (4+5) %	MEAN
Convenience in Transaction is the Reason for Cashless Payments in India	0.4	3.3	**3.7**	9.8	58.5	28	**86.5**	**4.11**

The above table shows that 86.5% of the resppondents agrees and 3.7% in total disagrees with the thought that the convinience in the cashless transaction is the main reason of cashless payment in India. where as 9.8 % are neutral to this though.

χ2-test:

H0: Convenience in transaction has no influence on cashless payments in India

H1: Convenience in transaction has an influence on cashless payments in India

Here Degree of freedom(df)= Total Categories-1= 5-1= 4

Level of Significance = 5%

Table 2.1 (B): Convenience in Transaction is the Reason for Cashless Payments in India

	Observed (O)	Expected (E)	Residual (O-E)	$(O-E)^2$	$\chi 2 = (O-E)^2/E$
Strongly Disagree	1	49.2	-48.2	2323.24	47.22033
Disagree	8	49.2	-41.2	1697.44	34.50081
Neutral	24	49.2	-25.2	635.04	12.90732
Agree	144	49.2	94.8	8987.04	182.6634
Strongly Agree	69	49.2	19.8	392.04	7.968293
Total($\chi 2$)					285.2602

The Critical value of Chi square ($\chi 2$) test at 5% significance level and 4 degree of freedom is 9.477, and the calculated value of Chi square ($\chi 2$) is 285.26 which is more than critical value 9.477, thus the Null hypothesis(H_0) is Rejected.

Table 2.2(A): Financial Incentives Encourage to Use Online Banking

	SD (1) %	**D (2) %**	**Total (1+2) %**	**N (3) %**	**A (4) %**	**SA (5%)**	**Total (4+5) %**	**MEAN**
Financial Incentives Encourage to Use Online Banking	2.4	5.3	**7.7**	6.1	78.9	7.3	**86.2**	**3.83**

The above table shows that 86.2% of the resppondents agrees and 7.7% in total disagrees with the thought that the Financial Incentives Encourage to Users to use the Online Banking, where as 6.1% are neutral to this though.

$\chi 2$-test:

H0: Financial Incentives do not Encourage users to Use Online Banking

H1: Financial Incentives Encourage users to Use Online Banking

Table 2.2(B): **Financial Incentives Encourage to Use Online Banking**

	Observed (O)	Expected (E)	Residual (O-E)	(O-E)2	$\chi 2$ = (O-E)2/ E
Strongly Disagree	6	49.2	-43.2	1866.24	37.93171
Disagree	13	49.2	-36.2	1310.44	26.63496
Neutral	15	49.2	-34.2	1169.64	23.77317
Agree	194	49.2	144.8	20967.04	426.1593
Strongly Agree	18	49.2	-31.2	973.44	19.78537
Total($\chi 2$)					534.2846

The Critical value of Chi square ($\chi 2$) test at 5% significance level and 4 degree of freedom is 9.477, and the calculated value of Chi square ($\chi 2$) is 534.22 which is more than critical value 9.477, thus the Null hypothesis(H_0) is Rejected.

Table 2.3(A): The major fear in cashless transactions is related to the security.

	SD (1) %	**D (2) %**	**Total (1+2) %**	**N (3) %**	**A (4) %**	**SA (5%)**	**Total (4+5) %**	**MEAN**

The major fear in cashless transactions is related to the security.	1.2	2.8	**4.0**	5.7	57.7	32.5	**90.2**	**4.17**

The above table shows that 90% of the sample agrees with the statement that The major fear in cashless transactions is related to the security, whereas just 4% do not agree with is and remaining 5.7% are neutral about it.

χ2-test:

H0: The major fear in cashless transactions is not related to the security

H1: The major fear in cashless transactions is related to the security

Table 2.3(B): The major fear in cashless transactions is related to the security.

	Observed (O)	Expected (E)	Residual (O-E)	$(O-E)^2$	$\chi2 = (O-E)^2/E$
Strongly Disagree	3	49.2	-46.2	2134.44	43.38293
Disagree	7	49.2	-42.2	1780.84	36.19593
Neutral	14	49.2	-35.2	1239.04	25.18374
Agree	142	49.2	92.8	8611.84	175.0374
Strongly Agree	80	49.2	30.8	948.64	19.2813
Total(χ2)					299.0813

The Critical value of Chi square (χ2) test at 5% significance level and 4 degree of freedom is 9.477, and the calculated value of Chi square (χ2) is 299.0813 which is more than critical value 9.477, thus the Null hypothesis(H_0) is Rejected.

Table 2.4(A): High transaction cost is the reason behind limited adoption of cashless transactions

	SD (1) %	**D (2) %**	**Total (1+2) %**	**N (3) %**	**A (4) %**	**SA (5)%**	**Total (4+5) %**	**MEAN**
High transaction cost is the reason behind limited adoption of cashless transactions	4.5	12.2	**16.7**	13.8	50.4	19.1	**69.5122**	**3.67**

The above table indicate that 69.5% of the respondents agrees with the statement that A lack of technical skills is a barrier to digital payments, while 16.7% disagrees with it and remaining 13.8% are just neutral.

χ2-test:

H0: High transaction cost is not the reason behind limited adoption of cashless transactions

H1: High transaction cost is the reason behind limited adoption of cashless transactions

Table 2.4(B): High transaction cost is the reason behind limited adoption of cashless transactions

	Observed (O)	Expected (E)	Residual (O-E)	$(O-E)^2$	$\chi2 = (O-E)^2/E$
Strongly Disagree	11	49.2	-38.2	1459.24	29.65935

Disagree	30	49.2	-19.2	368.64	7.492683
Neutral	34	49.2	-15.2	231.04	4.695935
Agree	124	49.2	74.8	5595.04	113.7203
Strongly Agree	47	49.2	-2.2	4.84	0.098374
Total(χ2)					155.6667

The Critical value of Chi square (χ2) test at 5% significance level and 4 degree of freedom is 9.477, and the calculated value of Chi square (χ2) is 155.6667 which is more than critical value 9.477, thus the Null hypothesis(H_0) is Rejected.

Table 2.5 (A): Complex process of transaction make cashless payment Difficult

	SD (1) %	**D (2) %**	**Total (1+2) %**	**N (3) %**	**A (4) %**	**SA (5) %**	**Total (4+5) %**	**MEAN**
Complex process of transaction makes cashless payment Difficult	6.1	20.3	**26.4**	18.7	39.4	15.4	**54.87805**	**3.38**

The above table evince that 54.8% of the respondents agrees with the statement that A lack of technical skills is a barrier to digital payments, while 26.4% disagrees with it and remaining 18.7% are just neutral.

χ2-test:

H0: Complex process of transaction do not make cashless payment Difficult

H1: Complex process of transaction make cashless payment Difficult

Table 2.5(B): Complex process of transaction make cashless payment Difficult

	Observed (O)	Expected (E)	Residual (O-E)	$(O-E)^2$	$\chi2 = (O-E)^2/E$
Strongly Disagree	15	49.2	-34.2	1169.64	23.77317
Disagree	50	49.2	0.8	0.64	0.013008
Neutral	46	49.2	-3.2	10.24	0.20813
Agree	97	49.2	47.8	2284.84	46.43984
Strongly Agree	38	49.2	-11.2	125.44	2.549593
Total(χ2)					72.98374

The Critical value of Chi square (χ2) test at 5% significance level and 4 degree of freedom is 9.477, and the calculated value of Chi square (χ2) is 72.98374 which is more than critical value 9.477, thus the Null hypothesis(H_0) is Rejected.

Table 2.6(A): Impoverished Internet Accessibility Is a Barrier to Cashless transactions

	SD (1) %	**D (2) %**	**Total (1+2) %**	**N (3) %**	**A (4) %**	**SA (5) %**	**Total (4+5) %**	**MEAN**

Impoverished Internet Accessibility Is a Barrier to Cashless transactions	1.2	3.3	**4.5**	5.7	67.5	22.4	**89.8374**	**4.07**

The above table reveal that 89.8% of the respondents agrees with the statement that A lack of technical skills is a barrier to digital payments, while 4.5% disagrees with it and remaining 5.7% are just neutral.

χ2-test:

H0: Impoverished Internet Accessibility is not a Barrier to Cashless transactions

H1: Impoverished Internet Accessibility Is a Barrier to Cashless transactions

Table 2.6(B): Impoverished Internet Accessibility Is a Barrier to Cashless transactions

	Observed (O)	Expected (E)	Residual (O-E)	$(O-E)^2$	$\chi2 = (O-E)^2/E$
Strongly Disagree	3	49.2	-46.2	2134.44	43.38293
Disagree	8	49.2	-41.2	1697.44	34.50081
Neutral	14	49.2	-35.2	1239.04	25.18374
Agree	166	49.2	116.8	13642.24	277.2813
Strongly Agree	55	49.2	5.8	33.64	0.68374
Total(χ2)					381.0325

The Critical value of Chi square (χ2) test at 5% significance level and 4 degree of freedom is 9.477, and the calculated value of Chi square (χ2) is 381.0325 which is more than critical value 9.477, thus the Null hypothesis(H_0) is Rejected.

Table 2.7(A): Cashless transactions are negatively affected by out-of-service POS machines.

	SD (1) %	**D (2) %**	**Total (1+2) %**	**N (3) %**	**A (4) %**	**SA (5%)**	**Total (4+5) %**	**MEAN**
Cashless transactions are negatively affected by out-of-service POS machines.	3.7	15.4	**19.1**	13.8	49.2	17.9	**67.07317**	**3.62**

The above table point that 67% of the respondents agrees with the statement that A lack of technical skills is a barrier to digital payments, while 19.1% disagrees with it and remaining 13.8% are just neutral.

χ2-test:

H0: Cashless transactions are not affected by out-of-service POS machines.

H1: Cashless transactions are negatively affected by out-of-service POS machines.

Table 2.7(B): Cashless transactions are negatively affected by out-of-service POS machines.

	Observed (O)	Expected (E)	Residual (O-E)	$(O-E)^2$	$\chi2 = (O-E)2/E$
Strongly Disagree	9	49.2	-40.2	1616.04	32.84634

Disagree	38	49.2	-11.2	125.44	2.549593
Neutral	34	49.2	-15.2	231.04	4.695935
Agree	121	49.2	71.8	5155.24	104.7813
Strongly Agree	44	49.2	-5.2	27.04	0.549593
Total($\chi2$)					145.4228

The Critical value of Chi square ($\chi2$) test at 5% significance level and 4 degree of freedom is 9.477, and the calculated value of Chi square ($\chi2$) is 145.4228 which is more than critical value 9.477, thus the Null hypothesis(H_0) is Rejected.

Table 2.8(A): A lack of technical skills is a barrier to digital payments

	SD (1) %	**D (2) %**	**Total (1+2) %**	**N (3) %**	**A (4) %**	**SA (5) %**	**Total (4+5) %**	**MEAN**
A lack of technical skills is a barrier to digital payments	1.2	3.3	**4.5**	5.7	67.5	22.4	**89.8374**	**4.20**

The above table present that 89.8% of the respondents agrees with the statement that A lack of technical skills is a barrier to digital payments, while 4.5% disagrees with it and remaining 5.7% are just neutral.

$\chi2$-test:

H0: A lack of technical skills is not a barrier to digital payments

H1: A lack of technical skills is a barrier to digital payments

Table 2.8(B): A lack of technical skills is a barrier to digital payments

	Observed (O)	Expected (E)	Residual (O-E)	$(O-E)^2$	$\chi2 = (O-E)^2/E$
Strongly Disagree	2	49.2	-47.2	2227.84	45.2813
Disagree	3	49.2	-46.2	2134.44	43.38293
Neutral	7	49.2	-42.2	1780.84	36.19593
Agree	167	49.2	117.8	13876.84	282.0496
Strongly Agree	67	49.2	17.8	316.84	6.439837
Total($\chi2$)					413.3496

The Critical value of Chi square ($\chi2$) test at 5% significance level and 4 degree of freedom is 9.477, and the calculated value of Chi square ($\chi2$) is 413.3496 which is more than critical value 9.477, thus the Null hypothesis(H_0) is Rejected.

Table 2.9(A): Cashless transactions are disrupted by a refusal to disclose financial information.

	SD (1) %	**D (2) %**	**Total (1+2) %**	**N (3) %**	**A (4) %**	**SA (5%)**	**Total (4+5) %**	**MEAN**

Cashless transactions are disrupted by a refusal to disclose financial information.	2.8	5.7	**8.5**	15.0	63.4	13.0	**76.42276**	**3.78**

The above table present that 76.4% of the respondents agrees with the statement that Cashless transactions are disrupted by a refusal to disclose financial information, while 8.5% disagrees with it and remaining 15% are just neutral.

χ2-test:

H0: Cashless transactions are not disrupted by a refusal to disclose financial information.

H1: Cashless transactions are disrupted by a refusal to disclose financial information.

Table 2.9(B): Cashless transactions are disrupted by a refusal to disclose financial information.

	Observed (O)	Expected (E)	Residual (O-E)	$(O-E)^2$	$(O-E)^2/E$
Strongly Disagree	7	49.2	-42.2	1780.84	36.19593
Disagree	14	49.2	-35.2	1239.04	25.18374
Neutral	37	49.2	-12.2	148.84	3.025203
Agree	156	49.2	106.8	11406.24	231.8341
Strongly Agree	32	49.2	-17.2	295.84	6.013008
Total(χ2)					302.252

The Critical value of Chi square (χ2) test at 5% significance level and 4 degree of freedom is 9.477, and the calculated value of Chi square (χ2) is 302.252 which is more than critical value 9.477, thus the Null hypothesis(H_0) is Rejected.

Table 2.10(A): Cashless transactions are restricted due to financial constraints.

	SD (1) %	**D (2) %**	**Total (1+2) %**	**N (3) %**	**A (4) %**	**SA (5) %**	**Total (4+5) %**	**MEAN**
Cashless transactions are restricted due to financial constraints.	4.9	15.9	**20.7**	18.7	48.8	11.8	**60.56911**	**3.47**

The above table present that 60.6% of the respondents agrees with the statement that Cashless transactions are restricted due to financial constraints, while 20.7% disagrees with it and remaining 18.7% are just neutral.

χ2-test:

H0: Cashless transactions are not restricted due to financial constraints.

H1: Cashless transactions are restricted due to financial constraints.

Table 2.10(B): Cashless transactions are restricted due to financial constraints.

Observed (O)	Expected (E)	Residual (O-E)	$(O-E)^2$	$\chi2 = (O-E)^2/E$

Strongly Disagree	12	49.2	-37.2	1383.84	28.12683
Disagree	39	49.2	-10.2	104.04	2.114634
Neutral	46	49.2	-3.2	10.24	0.20813
Agree	120	49.2	70.8	5012.64	101.8829
Strongly Agree	29	49.2	-20.2	408.04	8.293496
Total($\chi 2$)					140.626

The Critical value of Chi square ($\chi 2$) test at 5% significance level and 4 degree of freedom is 9.477, and the calculated value of Chi square ($\chi 2$) is 140.626 which is more than critical value 9.477, thus the Null hypothesis(H_0) is Rejected.

Table 2.11(A): Delayed Reimbursement in Case of Failed Transaction Obstructs Cashless Payments

	SD (1) %	D (2) %	Total (1+2) %	N (3) %	A (4) %	SA (5) %	Total (4+5) %	MEAN
Delayed Reimbursement in Case of Failed Transaction Obstructs Cashless Payments	2.0	8.1	**10.2**	8.5	64.6		**64.63415**	**3.86**

The above table evince that 64.6% of the respondents agrees with the statement that Delayed Reimbursement in Case of Failed Transaction Obstructs Cashless Payments, while 10.2% disagrees with it and remaining 8.5% are just neutral.

$\chi 2$-test:

H0: Delayed Reimbursement in Case of Failed Transaction do not Obstructs Cashless Payments

H1: Delayed Reimbursement in Case of Failed Transaction Obstructs Cashless Payments

Table 2.11(B): Delayed Reimbursement in Case of Failed Transaction Obstructs Cashless Payments

	Observed (O)	Expected (E)	Residual (O-E)	$(O-E)^2$	$\chi 2 = (O-E)^2 / E$
Strongly Disagree	5	49.2	-44.2	1953.64	39.70813
Disagree	20	49.2	-29.2	852.64	17.33008
Neutral	21	49.2	-28.2	795.24	16.16341
Agree	159	49.2	109.8	12056.04	245.0415
Strongly Agree	41	49.2	-8.2	67.24	1.366667
Total($\chi 2$)					319.6098

The Critical value of Chi square ($\chi 2$) test at 5% significance level and 4 degree of freedom is 9.477, and the calculated value of Chi square ($\chi 2$) is 319.6098which is more than critical value 9.477, thus the Null hypothesis(H_0) is Rejected.

Findings:

1. The statistics of respondents indicate that maximum respondents that is `75% belongs to the income range Rs 16,000-50,000 and the purpose of opening a bank account for maximum respondents that is 64.6% is saving money, while other reasons include requesting bank loan receiving remittances and government payment under various schemes.
2. The most preferable mode of online payment of the sample is BHIM app followed by Google Pay, Paytm, Phonepe, Mobiwik, Yono and Amazon pay.
3. From the Above Analysis It Is Clear That Most of The People Believe That Convenience in Transaction and Financial Initiatives Are the Reason to Boost Cashless Transactions and Encourage More And More People to Do Online Transaction.
4. While Respondents Also Believe That the Major Fear in Cashless Transactions Is Related to The Security as They Don't Feel That Their Data Is Safe.
5. Respondents Feel That High Transaction Cost Is the Reason Behind Limited Adoption of Cashless Transactions Especially in Rural Areas.
6. It Has Also Seen That Respondents Find the Transaction Process, Complex to Adopt and That Also Make Cashless Transactions Difficult.
7. Most of The Respondents Feel That Impoverished Internet Accessibility Is A Barrier to Cashless Transactions. Respondents Show Their Displeasure with Out of Service POS Machines and They Feel That Negatively Affect Cashless Transaction in India.
8. It Has Also Been Seen That Most of The Respondents Think That Digital Literacy Is Crucial as Lack of Technical Skills Create Obstacles for People to Adopt Cashless Transactions.
9. The Study Also Indicates That Most of The Respondents Think That Cashless Transactions Are Disrupted by A Refusal to Disclose Financial Information.
10. Respondents Also Believe That Cashless Transactions Are Restricted Due to Financial Constraints.
11. Most of The Respondents Find That Delayed Reimbursement in Case of Failed Transaction Obstructs Cashless Payments in India.

Suggestions:

1. Tech issues must be taken into account and also more professional human capital should really be activated to prevent data loss.
2. For effective use of electronic financial system, a client awareness campaign should be coordinated, especially for all those who are digitally uneducated.
3. Financial institutions must be extremely cautious when it comes to cyber-threats. For such a confidentiality, the user must be supported by appropriate safety and security.
4. Certain new regulations must be introduced in the India 's economic system to improve online payments.
5. Customers should receive adequate web-assistance from the financial institution portal in order to manage their banking service and money transfers 24X7.
6. In the rural areas branch and equipment offering online payments to people in rural areas, extra precautions should be exercised.

Conclusion:

Including an increasing number of payment options at their fingertips, buyers have no need to carry paper money in Their pocketbooks. With the use of multiple apps like Paytm, BHIM, phone pe, google pay etc, approximately everything that can be required to pay for with cash can technically be paid for by a credit card or digital wallets. On one hand where cashless transactions make transaction procedure more flexible and convenient to the users and financial initiatives are boosting the concept of going

cashless on ground level on the other hand we see that due to financial exclusion, low digital literacy, high transaction cost and complex procedures, people still hesitate to be cashless, in all these pros and cons the major threat among the respondents were found related to data security and hence their unwillingness to disclose their financial data.

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