

A COMPREHENSIVE STUDY: EXPLORING ADVANTAGES AND CONCERNS IN THE TRANSITION TO CASHLESS TRANSACTION

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ABSTRACT

This research explores the advantages and concerns associated with the acquisition of cashless undertakings in the context of contemporary commerce. The delves into the notable of transitioning to a cashless financial system, emphasizing cost and time efficiency, lower production costs, reduced crime rates, and stimulated economic growth. Moreover, the investigation underscore's role of digital infrastructure, convenience, security, transparency, and awareness campaigns in driving the transit towards cashless undertakings. The objectives of the investigation include evaluating the advantages of cashless remittances and identifying elements influencing concerns about cashless undertakings. The research methodology entails a sample size of 100 responders, employing analytical tools for instance standard deviation percentage method, t-test(independent), ANOVA test, and reliability testing. The reliability of the questionnaire is committed through Cronbach's alpha, ensuring excessive reliability for subsequent analysis. The study investigates hypotheses concerning both the benefits and concerns about cashless remittance based on demographic elements for instance age, gender, affiliation, marital status, qualification, and income. Results reveal notable distinct in perceptions based on age, gender, and education, while marital status and income demonstrate less pronounced variations. The findings contribute valuable insights into the elements shaping individuals' perceptions of cashless undertakings.

KEYWORDS: *Cashless Undertakings, Contemporary Commerce, Emphasizing Cost, Time Efficiency.*

Introduction

Cashless transaction exemplifies a financial trading escorted without the physical transfer of conventional forms of currency, for instance coins or paper bills. Absolutely, it anticipates on electronic means, like mobile applications, credit cards, and online banking systems, to ease the fetch of funds (Investopedia, 2022). This modification in transaction approach has gained prominence in contemporary commerce, offering an appropriate and efficient avenue for individuals and businesses to engage in financial undertakings without being relying on physical cash.

Significance of Cashless Transaction

The significance of cashless transactions spans various economic, societal, and technological dimensions, highlighting several key aspects:

- **Efficiency and Convenience:** Cashless transactions, including mobile payments, credit cards, and online banking, furnish a more efficient and convenient means of conducting financial exchanges, enabling swift transactions without the requirement for physical currency (Smith, 2020).

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- **Reduced Transaction Costs:** Cashless transactions minimize concealed costs associated with cash, such as production, transportation, and security expenditures, making financial operations more cost-effective for individuals and businesses (Jones et al., 2019).
- **Financial Inclusion:** Cashless transactions contribute to financial inclusion by providing approach to formal economic participation for individuals without traditional banking services. Mobile banking and digital wallets empower people, especially in distant areas, to capture in financial transactions (World Bank, 2018).
- **Enhanced Security:** Cashless transactions come with counselled security features like encryption, authentication, and real-time fraud detection, mitigating threats associated with physical cash transactions (Gupta et al., 2017).
- **Digital Recordkeeping:** Cashless transactions depart from a digital trail, facilitating accurate recordkeeping and transparency for individuals, businesses, and governments in terms of accounting, taxation, and auditing (Brown & Miller, 2016).
- **Promotion of Technological Innovation:** The shift towards cashless transactions motivates ongoing technological innovation, fostering developments in fintech, mobile payment systems, and blockchain technologies to provide secure and efficient transaction methods (Agarwal & Shankar, 2018).
- **Global Commerce:** Cashless transactions facilitate international trade by offering seamless cross-border payment options, crucial in the era of globalized economies and e-commerce (BIS, 2021).
- **Adaptation to Changing Consumer Behaviour:** Cashless transactions align with contemporary lifestyle choices, particularly among younger generations, who prefer the convenience of digital payment methods (Lee et al., 2020).
- **Public Health Considerations:** The acquisition of cashless transactions gained significance, especially during events like the COVID-19 pandemic, due to concerns about pathogen transmission through physical currency. Contactless payment methods offer a hygienic substitute. (World Health Organization, 2020).
- **Government Initiatives and Policy Objectives:** Governments globally actively encourage cashless transactions to curb black money, reduce corruption, and achieve greater financial transparency as part of their policy objectives (IMF, 2019).
- **Taxation:** With more money in banks, opportunities for income hiding and tax evasion decrease, leading to lower tax rates for the overall country (Slemrod & Weber, 2012).
- **Accountability and Transparency:** Cashless transactions enhance transparency and compliance, making it easier to track the flow of money, fostering prospects for business and investment (La Porta et al., 2008).
- **Reduced Red Tape and Bureaucracy:** Electronic transactions lessen corruption, speed up services, and discourage illegal activities, impacting channels like hawala (Bhagwati & Dellalfar, 1993).
- **Expense Tracking:** Cashless transactions facilitate accurate tracking of expenses, providing valuable information for decision-making (Chen & Yen, 2011).

In summary, the significance of cashless transactions reclines in their ability to streamline financial processes, enhance security, promote financial inclusion, and align with evolving technological trends and societal preferences.

Objectives

The research's objectives revolved around two key aspects:

- Assessing the advantages associated with cashless remittances.
- recognizing the elements causing concern about cashless remittance methods.

Research Methodology

- **Sample Size:** The current research comprises a sample size of 100 responders, selected through a random sampling method. The questionnaire was administered to individuals from diverse backgrounds, representative of the general population.

Analytical Tools

The primary data analysis was executed using numerous analytical techniques:

- Percentage method
- Standard deviation
- Independent t -test
- ANOVA test.

Reliability Test

Reliability Statistics	
Cronbach's Alpha	N of Items
.907	8

The table exhibited that demonstrates the reliability of the questionnaire. The calculated value of Cronbach's alpha is 0.907, exceeding the accepted the threshold of 0.7. This outcome assures that the data obtained from the questionnaire is highly reliable and suitable for subsequent analysis.

The study's objectives were formulated around specific hypotheses

- H₁:** There be no substantial disparity among responders regarding the advantages of cashless remittance, considering their demographic elements for instance age gender, marital status, affiliation, income and qualification.
- H₂:** There exists no substantial divergence among responders in their apprehensions about cashless remittance, considering their demographic determinants such as marital status gender, age, income, affiliation and qualification.

Review of Literature

Mukhopadhyay, B. (2016) exhibits the process of transitioning India towards a cashless financial system. The research reveals that a 1% rise in card undertaking volume leads to an annual consumption uplift of 0.039% and GDP growth of 0.024%. Moreover, the article recognizes the proportion of cashless undertakings in the economy and the primary elements affecting them. It proposes the prerequisite of policy interventions to cultivate a substantial community of non-cash participants within the network.

Tawade, P. H. (2017) explores India's progression towards a cashless financial system, acknowledging existing provocation. While recognizing advantages for instance swift undertaking settlements, user-friendliness, enhanced transparency, and lessen default risks, the investigation also focusses obstacles like limited digital literacy, inadequate financial infrastructure, and concealed charges in digital undertakings. It emphasizes the prerequisite for robust security measures and implicit marketing of policies promoting cashless incentives to facilitate smoother transition. Furthermore, transitioning to a cashless economy has the potential to diminish instances of illicit funds, tax evasion and counterfeit currency.

Tawad, P. H. (2021), the emphasis is on investigating the progression, advantages, and barrier associated with cashless undertakings enclosed by India. The investigation emphasis the advantages of cashless undertaking, including speedy undertakings, cost savings, and lower susceptibility to fraud. Nevertheless, transitioning to a cashless society entails addressing specific provocation for instance corruption and the essential for traceability in financial undertakings.

Assessment of Hypothesis

Hypothesis Ho1

“There be no substantial disparity among responders regarding the advantages of cashless remittance, considering their demographic elements for instance age gender, marital status, affiliation, income and qualification.”

This hypothesis comprises five sub-hypotheses whatever is tested as outlined below:

Hypothesis Ho1a

“There be no substantial disparity among responders regarding the advantages of cashless remittance, considering their demographic elements for instance gender”.

The examination of sub-hypothesis H1a involved escorting an independent sample t-test (Table 1) with the responder's gender as the independent variable and advantages of cashless remittances as the dependent variable.

Table 1: Independent sample t-test was escorted to explore the association between gender and advantages of cashless remittance

Variable	Gender	N	Mean	SD	t-value	p-value
Awareness towards cashless Transaction after demonetization	Male	73	2.1781	.76997	-1.796	.045
	Female	27	2.5185	1.01414		

*Significance level ($p < 0.05$)

** High significance level ($p < 0.01$)

*** Very high significance level ($p < 0.001$)

Analysis out of table indicates a notable distinct between female and male responders regarding the advantages of cashless payments, given that the p-value is below 0.05. Consequently, the hypothesis asserting that "There be no substantial disparity among responders regarding the advantages of cashless remittance, considering their demographic elements for instance gender" is rejected.

Hypothesis H1b

"There be no substantial disparity among responders regarding the advantages of cashless remittance, considering their demographic elements for instance marital status".

Sub-hypothesis H6b underwent testing through t-test, as detailed in Table 2 & 3. In this analysis, the marital status of the responders was considered the independent variable, while the advantages of cashless remittances as dependent variable.

Table 2: t-test (An independent sample) was used to peruse the association between marital status and awareness of cashless undertakings following demonetization

Marital status	N	Mean	SD	t-value	p-value
Married	82	2.2927	.82384	.567	.240
Unmarried	18	2.1667	.98518		

*Significance level ($p < 0.05$)

** High significance level ($p < 0.01$)

*** Very high significance level ($p < 0.001$)

Analysis out of table indicates a substantial disparity between responders with marital statuses categorized as "married" and "unmarried" regarding the advantages of cashless remittances ($t = .567$, $p = 0.0240$), with a p-value greater than 0.05. Consequently, the hypothesis stating that "There be no substantial disparity among responders regarding the advantages of cashless remittance, considering their demographic elements for instance marital status" is accepted.

Hypothesis H1c

"There be no substantial disparity among responders regarding the advantages of cashless remittance, considering their demographic elements for instance age group".

Sub-hypothesis H1c was examined utilizing the "One-way ANOVA" technique, with the responders age as the independent variable, while the advantages of cashless remittances as dependent variable.

Table 3: One-way ANOVA tested correlation between age and Advantages regarding cashless undertakings following demonetization

Age	N	Mean	SD	F-value	p-value
0-20	18	1.8333	.61835	2.618	0.040
21-30	25	2.3600	.90738		
31-40	32	2.1875	.64446		
41-50	22	2.5455	1.05683		
Above 50	3	3.000	1.0000		
Total					

*Significance level ($p < 0.05$)

** High significance level ($p < 0.01$)

*** Very high significance level ($p < 0.001$)

Table 3 indicates a significant discrepancy among responders across various age groups concerning the advantages of cashless remittances ($F=2.618, p=.040$). With the p-value being less than .05, the hypothesis suggesting “There be no substantial disparity among responders regarding the advantages of cashless remittance, considering their demographic elements for instance age group” was dismissed.

Subsequently, Post HOC Multiple Comparisons test using LSD method was escorted to investigate association between age and advantages of cashless remittances (Table 4)

Table 4: Post HOC - Multiple Comparisons Using LSD Test between Age and Advantages of cashless remittance following demonetization

(I)Age	(J)Age	Mean Difference (I-J)	Std Error	p-value
Below 21years	21-30years	-.52667	.23276	.178
	31-40years	-.35417	.18499	.325
	41-50years	-.71212	.26835	.082
	Above 50 years	-1.16667	.59546	.473
	Below 21 years	.52667	.23276	.178
21-30 years	31-40 years	.17250	.21427	.928
	41-50	-.18545	.28931	.967
	Above 50	-.64000	.60520	.819
31-40 years	Below 21 years	.35417	.18499	.328
	21-30 years	-.17250	.21427	.928
	41-50years	-.35795	.25248	.621
	Above 50 years	-.81250	.58848	.687
41-50 years	Below 21 years	.71212	.26835	.082
	21-30 years	.18545	.28931	.967
	31-40 years	.35795	.25248	.621
	Above 50 years	-.45455	.61976	.933
Above 50 years	Below 21 years	1.1667	.59546	.473
	21-30 years	.6400	.60520	.819
	31-40 years	.81250	.58848	.687
	41-50 years	.45455	.61976	.933

*Significance level ($p < 0.05$)
 ** High significance level ($p < 0.01$)
 *** Very high significance level ($p < 0.001$)

Hypothesis H1d

“There be no substantial disparity among responders regarding the advantages of cashless remittance, considering their demographic elements for instance education”.

The analysis of sub-hypothesis Hypothesis H6d was examined using the “One-way ANOVA” technique with responders’ education as independent variable and advantages of cashless remittances as dependent variable.

Table 5: One-way ANOVA tested correlation between education and Advantages regarding cashless undertakings following demonetization

Education	N	Mean	SD	f-value	p-value
H. Secondary	14	2.00	.78446	3.453	.011
U.G.	37	2.6488	.97799		
P.G.	41	2.0244	.68876		
Other	5	2.4	.54772		
Uneducated	3	2.00	.0000		
Total	100	2.27	.85108		

*Significance level ($p < 0.05$)
 ** High significance level ($p < 0.01$)
 *** Very high significance level ($p < 0.001$)

Table 5 demonstrates a notable distinction among responders with numerous education level regarding the advantages of cashless payments ($F=3.453$, $p=.011$), with the p-value being below .05. Consequently, the hypothesis suggesting "There be no substantial disparity among responders regarding the advantages of cashless remittance, considering their demographic elements for instance education" was invalidated.

Hypothesis H1e

"There be no substantial disparity among responders regarding the advantages of cashless remittance, considering their demographic elements for instance income".

The sub-hypothesis Hypothesis H6e was examined using the "One-way ANOVA" technique with responder's income as the independent variable and advantages of cashless remittances as dependent variable.

Table 6: One-way ANOVA tested correlation between income and Advantages regarding cashless undertakings following demonetization

Income	N	Mean	SD	F-value	p-value
Less than 2 L (p.a)	59	3.1525	1.21504	.622	.648
2-4 L (p.a.)	16	3.1875	1.47054		
4-8 L (p.a.)	13	2.9231	1.25576		
8-12 L (p.a.)	4	4.000	.81650		
Above 12 L (p.a.)	8	3.3750	1.18773		
Total	100	3.18	1.24219		

*Significance level ($p < 0.05$)

** High significance level ($p < 0.01$)

*** Very high significance level ($p < 0.001$)

Based on the findings from Table 3 & 6, there exists a notable variance among responders with differing income levels regarding the advantages of cashless payments ($F=.622$, $p=0.648$), with the p-value greater than 0.05. Consequently, the hypothesis positing "There be no substantial disparity among responders regarding the advantages of cashless remittance, considering their demographic elements for instance income" was accepted.

Assessment of Hypothesis

Hypothesis H2

"There exists no substantial divergence among responders in their apprehensions about cashless remittance, considering their demographic determinants such as marital status gender, age, income, affiliation and qualification".

This hypothesis comprises five sub-hypotheses, whatever is tested as outlined below.

Hypothesis H2a

"There exists no substantial divergence among responders in their apprehensions about cashless remittance, considering their demographic determinants for instance gender".

The examination of sub-hypothesis H2a involved escorting an independent sample t-test (Table 7) with the responder's gender as the independent variable and concerns in cashless remittances as the dependent variable

Table 7: Independent sample t-test was escorted to explore the association between gender and concern in cashless remittance

Variable	Gender	N	Mean	SD	p-value	t-value
Concern in cashless transactions	Male	73	2.6164	1.31899	.022	-1.764
	Female	27	3.111	1.01274		

*Significance level ($p < 0.05$)

** High significance level ($p < 0.01$)

*** Very high significance level ($p < 0.001$)

Analysis of the table reveals a notable disparity between male and female responders concerning concerns in cashless remittances, indicated by a p-value below 0.05. Consequently, the hypothesis suggesting "There exists no substantial divergence among responders in their apprehensions about cashless remittance, considering their demographic determinants for instance gender" was dismissed

Hypothesis H2b

“There exists no substantial divergence among responders in their apprehensions about cashless remittance, considering their demographic determinants for instance marital status”.

Sub-hypothesis H2b underwent testing through an independent sample t-test, as outlined in Table 8. In this analysis, the responder’s marital status served as the independent variable, while concerns in utilization of cashless remittances were considered the dependent variable.

Table 8: An independent sample t-test was used to peruse the relationship between marital status and concern in utilization of cashless undertakings

Marital status	N	Mean	SD	t-value	p-value
Married	84	2.6905	1.27039	-1.085	.468
unmarried	16	3.0625	1.18145		

*Significance level (p < 0.05)
 ** High significance level (p < 0.01)
 *** Very high significance level (p < 0.001)

Analysis out of the table indicates that responders’ marital status categorized as "married" and "unmarried" do not exhibit a notable distinct in concerns related to cashless remittances, given that the p-value is greater than 0.05. Therefore, the hypothesis asserting that " There exists no substantial divergence among responders in their apprehensions about cashless remittance, considering their demographic determinants for instance marital status." is accepted.

Hypothesis H2c

“There exists no substantial divergence among responders in their apprehensions about cashless remittance, considering their demographic determinants for instance age group”.

The assessment of sub-hypothesis H7c involved employing the "One-way ANOVA" technique, with the responders age serving as the independent variable and concerns in cashless remittances as the dependent variable.

Table 9: One-way ANOVA tested correlation between age group and concern regarding cashless undertakings

Age	N	Mean	SD	f-value	p-value
Below 20	11	2.5455	1.03573	1.655	.167
21-30 years	25	3.28	1.13725		
31-40 years	39	2.51	1.37404		
41-50 years	22	2.7273	1.24142		
Above 50	3	2.333	.57735		
Total	100	2.75	1.25831		

*Significance level (p < 0.05)
 ** High significance level (p < 0.01)
 *** Very high significance level (p < 0.001)

Analysis of Table 9 reveals a notable variation among responders across numerous age groups concerning concerns in cashless payments (F=1.655, p=0.167), with the p-value greater than 0.05. Consequently, the hypothesis asserting “There exists no substantial divergence among responders in their apprehensions about cashless remittance, considering their demographic determinants for instance age group” was accepted.

Hypothesis H2d

“There exists no substantial divergence among responders in their apprehensions about cashless remittance, considering their demographic determinants for instance education”.

Sub-hypothesis H2d was explored utilization the "One-way ANOVA" method, where the responder’s education was considered the independent variable, and concerns about cashless remittances served as the dependent variable.

Table 10: One-way ANOVA test evaluated the association between Education level and Concerns regarding cashless payments

Education	N	Mean	SD	f-value	p-value
H. Secondary	12	2.667	1.07309	2.139	.082
U.G.	30	3.0333	1.09807		
P.G.	46	2.5435	1.2954		
Other	8	3.5	1.414		
Uneducated	4	1.75	1.5		
Total	100	2.75	1.25831		

*Significance level ($p < 0.05$)** High significance level ($p < 0.01$)*** Very high significance level ($p < 0.001$)

Findings from Table 10 reveal a notable distinction among responders with varying education levels concerning concerns about cashless payments ($F=2.139$, $p=0.082$), as the p-value is greater than 0.05. Consequently, the hypothesis asserting that "There exists no substantial divergence among responders in their apprehensions about cashless remittance, considering their demographic determinants for instance education." is accepted.

Hypothesis H2e

"There exists no substantial divergence among responders in their apprehensions about cashless remittance, considering their demographic determinants for instance income".

Sub-hypothesis H2e was investigated utilizing the "One-way ANOVA" technique, with the responder's income as the independent variable and concerns related to cashless remittances as the dependent variable.

Table 11: One-way ANOVA test evaluated the association between Income and Concerns regarding cashless payments

Income	N	Mean	SD	f-value	p-value
Less than 2 L (p.a)	59	2.8136	1.27947	1.288	.280
2-4 L (p.a)	16	3.0625	1.38894		
4-8 L (p.a)	13	2.0769	.86232		
8-12 L (p.a)	4	3.000	1.15470		
Above 12 L (p.a)	8	2.625	1.3024		
Total	100	2.75	1.25831		

*Significance level ($p < 0.05$)** High significance level ($p < 0.01$)*** Very high significance level ($p < 0.001$)

Analysis of Table 11 reveals a notable disparity among responders with varying income levels regarding concerns regarding cashless payments, with a p-value greater than 0.05. Consequently, the hypothesis suggesting "There exists no substantial divergence among responders in their apprehensions about cashless remittance, considering their demographic determinants for instance income" was accepted.

Conclusion

This research underscores the multifaceted association of transitioning to a cashless economy. The advantages, including cost and enhances efficiency, decreased production expenses, reduced crime rates, and boosted economic growth, are juxtaposed against concerns related to age, gender and education. It underscores the essential role of digital infrastructure, security, convenience, security transparency, and awareness initiatives in driving the adoption of cashless undertakings.

The research not only enriches to the existing literature on cashless undertakings but also provides practical insights for policymakers, businesses, and individuals. The outcomes underscores the necessity for targeted interventions and awareness campaigns to address apprehensions and advocate the advantages of cashless undertakings. As digital payment systems continue to evolve, understanding the dynamics of user perceptions becomes increasingly crucial for fostering a seamless transition to a cashless economy.

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