Womens' Awareness Towards Digital Payment System

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Digital revolution in the past two decades has significantly contributed to the adoption of digital payments in the country. Digital payment has provided an opportunity for India to empower its people to overcome the constraints in traditional banking system. Digital Banking has sophisticated, innovative and cost-effective products which can be used 24/7. Though the awareness and use of technology related products are increasing the day by day, the rate of use of same by women is less when compared to men. This paper aims to understand women's level of awareness and their comfortability in using digital payments. So, the study aims to analyse awareness, user behaviour and problems faced by them in using digital payments by women. by using Technology Acceptance Model -3 (TAM) and Technology Readiness (TR).

Keywords: Digital Payments, Acceptance, Adoption, Awareness, Technology, Readiness.

1. Introduction

In the rapidly evolving landscape of the digital economy, digital payments have emerged as a pivotal component in transforming financial transactions, simplifying access to goods and services, and enhancing the overall economic infrastructure. The integration of digital payment systems has gained momentum globally, making financial transactions more accessible, efficient, and secure. While digital payments have significantly altered the way individuals, businesses, and governments interact with money, an important dimension of this transformation is the role of women.

Women's engagement with digital payment platforms is a crucial area of study, as it reflects broader shifts in financial inclusion, empowerment, and societal change. The adoption and use of digital payments by women have become key markers in understanding the digital divide, financial accessibility, and gender-specific behavioural trends in the digital era. As

nations strive for greater financial inclusion and equitable access to technology, understanding how women engage with digital payments offers insights into overcoming barriers and promoting gender equality in the digital economy.

The Context of Women and Digital Payments

The proliferation of mobile phones, internet access, and digital financial platforms has revolutionized payment systems worldwide. In India, for instance, the government has made concerted efforts to promote digital financial inclusion through various initiatives such as the Digital India campaign, the introduction of the Pradhan Mantri Jan Dhan Yojana (PMJDY), and the promotion of mobile wallets and UPI (Unified Payments Interface). These initiatives aim to bridge the digital divide by making banking and financial services accessible to every citizen, including women, especially in rural and underserved regions.

However, despite these efforts, a gender gap in digital financial literacy and usage persists. Studies have shown that women are often less likely to adopt and engage with digital payment platforms compared to men, due to a combination of socio-economic, cultural, and technological barriers. These barriers include limited access to smartphones and the internet, lower levels of financial literacy, concerns about security, and a lack of confidence in navigating digital platforms.

On the other hand, the digital payment landscape offers women numerous opportunities for empowerment. Through digital payments, women can access a range of financial services, including savings, credit, and insurance, without having to rely on traditional banking systems that may be geographically distant or culturally restrictive. Furthermore, digital payments can enable women to manage their finances independently, enhance their participation in the formal economy, and promote financial autonomy, which can be a critical step towards reducing gender inequality.

The Importance of Understanding Women's Engagement with Digital Payments

Understanding women's engagement with digital payments is not just a matter of promoting technological adoption; it is also about addressing deeper societal and economic issues that affect women's lives. Digital payments can play a transformative role in the socio-economic development of women by facilitating access to financial services and economic opportunities that were previously unavailable to them.

One key aspect of women's engagement with digital payments is financial inclusion. In many parts of the world, women are often excluded from formal financial systems due to factors such as lack of documentation, socio-cultural norms, or geographical barriers. Digital payments, however, can bypass these obstacles, allowing women to participate more fully in the economy. Women who traditionally lacked access to physical bank branches can now perform financial transactions from the comfort of their homes, using their mobile phones. This can be particularly beneficial in rural areas where banks are sparse and traveling to a branch is time-consuming and expensive.

Moreover, women's engagement with digital payments can serve as a catalyst for broader socio-economic change. Digital platforms enable women to run small businesses, receive payments for services, and access products or services that were previously difficult to obtain. In the realm of entrepreneurship, digital payments provide women with the tools to *Nanotechnology Perceptions* Vol. 20 No.6 (2024)

engage in e-commerce, freelance work, and online marketplaces, contributing to their economic independence. Furthermore, digital payments can facilitate women's participation in the gig economy, providing them with flexible work opportunities that align with their schedules and responsibilities.

Another significant factor is the role of digital payments in improving women's access to healthcare, education, and social welfare programs. Many government and private sector programs aimed at improving women's well-being are increasingly being delivered digitally. For example, cash transfers and subsidies, which were once distributed physically, are now transferred through mobile wallets and bank accounts. These services can enhance women's access to essential resources, providing them with more control over their finances and the ability to make decisions that benefit their families and communities.

Despite the potential benefits, it is crucial to recognize the challenges women face when engaging with digital payments. These challenges are not merely technological but are deeply rooted in social, cultural, and economic factors. Issues such as digital illiteracy, lower income levels, and a lack of trust in digital systems can hinder women's willingness to adopt these technologies. Furthermore, security concerns, such as fears of fraud and cybercrime, disproportionately affect women, especially those who are less familiar with technology or have limited digital literacy.

To address these challenges, a comprehensive understanding of women's engagement with digital payments is necessary. This understanding should encompass not only the technological aspects but also the broader social and cultural contexts that influence women's behaviors, preferences, and barriers to adoption. Policymakers, businesses, and financial institutions must recognize these factors and design inclusive digital payment systems and policies that cater to the unique needs of women. By doing so, they can create an enabling environment that empowers women to fully benefit from the opportunities that digital payments provide.

Digital Payments by Women: An Analysis Using Technology Acceptance Model (TAM-3)

The adoption of digital payment systems by women has been gaining significant attention in recent years, especially with the increasing accessibility of smartphones, internet connectivity, and various government initiatives aimed at promoting cashless transactions. The Technology Acceptance Model (TAM), specifically the extended version TAM-3, offers a comprehensive framework to understand the factors influencing the adoption of technology, including digital payment systems, by women.

Technology Acceptance Model (TAM-3) is an extension of the original TAM, which focuses on two primary constructs: Perceived Ease of Use (PEOU) and Perceived Usefulness (PU). TAM-3 further expands on these factors by incorporating additional variables such as Social Influence (SI), Cognitive Instrumental Processes (CIP), and Affect, to offer a more in-depth understanding of technology adoption behaviors.

1. Perceived Usefulness (PU)

For women, the perceived usefulness of digital payments plays a crucial role in their decision to adopt these technologies. Women may view digital payment platforms as a convenient *Nanotechnology Perceptions* Vol. 20 No.6 (2024)

and time-saving alternative to traditional cash transactions. Features such as fast payments, seamless transactions, and the ability to track expenses digitally can increase the perceived usefulness. Women engaged in small businesses, homemakers, or those managing household finances often find these benefits attractive, as digital payments offer better financial management tools.

2. Perceived Ease of Use (PEOU)

The perceived ease of use is another critical factor influencing women's adoption of digital payments. Women may be hesitant to use digital platforms if they find them complicated or difficult to navigate. Therefore, platforms designed with a user-friendly interface and simple steps to make transactions are more likely to be adopted. Mobile wallets, apps with multilingual options, and features such as biometric authentication (fingerprint or face recognition) reduce barriers to entry and make the technology more accessible to a wider female demographic, particularly those who may have limited digital literacy.

3. Social Influence (SI)

Social influence plays a significant role in women's adoption of digital payments. Peer pressure, recommendations from friends and family, and the influence of social circles can strongly impact women's decisions. Women are often more receptive to adopting new technology when it is popular among their peers or when they see others in their social environment benefiting from it. Social campaigns promoting financial inclusion and womencentric digital payment platforms can drive higher adoption rates.

4. Cognitive Instrumental Processes (CIP)

Cognitive instrumental processes are the mental evaluations or thought processes that influence an individual's decision to use a particular technology. For women, factors like trust, security, and the ability to access customer support may influence their perception of the digital payment system's credibility. Digital payment providers need to address concerns around data privacy and security to ensure that women feel safe and confident in using these platforms. Education about fraud prevention, cyber security, and safe transaction practices also plays a role in increasing adoption rates.

5. Affect

Affective factors refer to emotional reactions towards technology. Positive emotions such as enjoyment, excitement, or empowerment from using digital payment systems can drive adoption among women. For instance, some women may feel empowered by the ability to make independent transactions, track spending, or access financial services without reliance on traditional banking systems. Emotional connections, such as the sense of empowerment or convenience, can positively influence their willingness to embrace digital payments.

2. Literature review

1.Sahu, S., & Patel, P. (2018) Title: "Adoption of Digital Payment Systems by Women in Rural India: A Study of Key Challenges" This study explores the adoption patterns of digital payment systems among rural women in India. The authors highlight the challenges women

- face, including low digital literacy, lack of internet access, and socio-cultural barriers, in adopting digital payment methods.
- 2.Kumar, A., & Sharma, S. (2019) Title: "Factors Influencing Women's Participation in Digital Payment Systems: Evidence from Indian Metro Cities" The research investigates the factors that influence urban women's engagement with digital payment systems. It identifies education level, smartphone penetration, and financial literacy as the major enablers of adoption.
- 3.Rani, M., & Yadav, R. (2020) Title: "Barriers to Women's Engagement with Digital Payments in India: A Comprehensive Analysis" This paper examines the barriers that hinder women's participation in digital payments, including gender stereotypes, financial dependence, and limited access to digital devices. It emphasizes the need for targeted policies to increase women's digital financial inclusion.
- 4.Singh, S., & Verma, P. (2020) Title: "Digital Payment Systems: Women's Behavioural Response and Adoption in India" The authors focus on how socio-economic factors such as income, family structure, and education affect women's behaviour toward adopting digital payment methods. The study finds that women from higher-income families are more likely to use digital payment platforms.
- 5.Joshi, N., & Ghosh, P. (2021) Title: "Understanding the Role of Women in Digital Payment Ecosystem: Insights from Tier-II Cities in India" The study highlights the role of women in the adoption of digital payments in smaller cities and towns. It discusses the challenges related to low internet penetration, mobile data affordability, and insufficient knowledge about secure digital transactions.
- 6.Bhatt, P., & Sharma, R. (2022) Title: "Empowering Women through Digital Financial Inclusion: A Case Study of Digital Payments" This study investigates how digital payment systems have empowered women by providing them with greater control over their financial transactions. It focuses on women's self-reported benefits from using digital payments, including independence and financial literacy.
- 7.Soni, M., & Gupta, A. (2023) Title: "Adoption of Digital Payments by Women Entrepreneurs: Opportunities and Challenges" The paper explores the barriers and opportunities for women entrepreneurs in adopting digital payment platforms. The authors argue that while digital payments offer convenience and accessibility, factors such as trust issues and technological readiness continue to challenge widespread adoption.
- 8.Rao, S., & Choudhury, N. (2024) Title: "Women's Digital Payment Adoption and Behavioural Insights: A Study of Urban and Rural India" This recent study compares the digital payment adoption behaviour of women in both urban and rural India, analysing the role of government initiatives, financial education, and societal norms in shaping women's engagement with digital payments.

3. Statement of problem:

Tremendous change in the banking and technology, the number of online banking users have increased. In the current scenario most of the people prefer to use digital payments services *Nanotechnology Perceptions* Vol. 20 No.6 (2024)

than traditional banking services, but still some people are hesitant and especially women users are less when compared to male users. The study attempt to focus on the awareness level, problem faced in using the digital payments. Cash still plays a dominant role in many of the urban and most of the villages in India. Lack of infrastructure and awareness, presence of unorganized sectors, and security issues with regard to digital payments are some of the major challenges facing the cash-based economy.

4. Objective

The primary objective of the study is

- 1. To examine the extent of awareness of different digital payment by women
- 2. To understand the user behaviour and problems faced by them in using digital payments.

5. Methodology

The study focuses on the awareness level and attempted to understand the usage behaviour and problems faced by women to use digital payments. This study is descriptive in nature. Both primary and secondary data are used for this purpose. Primary data is collected by structured questionnaire by distributing randomly to the female customers and Secondary data are collected from the sources like journals and web pages. Simple Random Sampling methods is used to collect the required data for the research. Data was collected by questionnaire distributed only to female bank customers. The study focuses on the awareness levels as it the basic measure to fine the satisfaction level. The first objective of examining the extent of awareness of various digital payment by women is classified into 2 degrees – Fully aware and partly aware. The research questionnaire used to collect data is divided into two parts. Questions relating to demographic character was included in the part –I and the question that evaluates the self-efficacy, perceived usefulness and user behaviour were in the part II.

5.1 Details about age of the respondents

Age	Frequency	Valid Percent	Cumulative Percent
upto 20 years	22	18.3	18.3
21-35 years	38	31.7	50.0
36-50 years	20	16.7	66.7
Above 50 years	40	33.3	100.0
Total	120	100.0	

The above table 1.1 shows that details about age of the respondents. It is found that 22 (18.3) respondents are from the age group of upto 20 years, 38 (31.7) respondents are from the age group of 21-35 years, 20 (16.7) respondents are from the age group of 36-50 years and 40 (33.3) respondents are from the age group of above 50 years. Hence the majority of respondents (33.3) are from the age group of above 40 years

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5.2 Details about marital status of the respondents

	Frequency	Percent	Cumulative Percent
Married	89	74.2	74.2
Unmarried	31	25.8	100.0
Total	120	100.0	

The above table 1.2 indicates that details about marital status of the respondents. It is found that 89 (74.2) respondents are married and 31 (25.8) respondents are unmarried. Hence majority (74.2) respondents are married has been chosen for this research study.

5.3 Details about educational qualification of the respondents

	Frequency	Percent	Cumulative Percent
School level	21	17.5	17.5
Under graduate	40	33.3	50.8
Post graduate	119	15.8	66.7
Professionals	40	33.3	100.0
Total	120	100.0	

The above table 1.3 demonstrates that details about educational qualification of the respondents. It is found that 21 (17.5) respondents have qualified at school level, 40 (33.3) respondents have completed under graduate, 19 (15.8) respondents have completed post graduate and 40 (33.3) respondents have completed professional courses. Hence majority (33.3) respondents have qualified at under graduate and professional level.

Details about monthly income of the respondents

	Frequency	Percent	Cumulative Percent
upto Rs. 20,000	14	11.7	11.7
Rs. 20001 - 50000	60	50.0	61.7
Rs. 50001 - 100000	20	16.7	78.3
Above Rs. 100000	26	21.7	100.0
Total	120	100.0	

The above table 1.4 reveals that details about monthly income of the respondents. It is found that 14 (11.7) respondents earn upto Rs. 20,000 monthly, 60 (50.0) respondents earn Rs. 20,001 - 50,000 rupees monthly, 20 (16.7) respondents earn Rs. 50,001 - 1,00,000 monthly and 26 (21.7) respondents earn above Rs. 1,00,000 monthly. Hence it is clearly found that majority (50.0) respondents earn Rs. 20,001 - 50,000 monthly.

5.4 Chi-square test between demographic variables of the respondents with perceived usefulness of digital payments

	Age		Marital status		Educational status		Occupation		Monthly income	
	χ2	Sig.	χ2	Sig.	χ2	Sig.	χ2	Sig. value	χ2	Sig. value
		value		value		value				
View account summary	6.676 ^a	.878	4.824a	.306	10.014 ^a	.615	31.952a	.011	28.392a	.005
and check balance										
View and download bank	16.336a	.176	4.339a	.362	15.077a	.237	28.418 ^a	.028	14.111 ^a	.294
account statements										
Transferring money using	8.688a	.729	3.916a	.417	15.688a	.206	11.605a	.771	27.419 ^a	.007
NEFT										
Transferring money using	23.644a	.023	2.600a	.627	14.933a	.245	29.949a	.018	19.763ª	.072
RTGS										
Transferring money using	9.568a	.654	1.855a	.762	5.336a	.946	29.777a	.019	4.522a	.972
IMPS/UPI										
Use of Debit/Credit cards	9.568a	.654	3.847a	.427	29.207a	.004	6.297a	.985	17.882a	.119
for purchasing										

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Using point of sale machine	6.815 ^a	.870	2.176ª	.704	7.741 ^a	.805	20.496 ^a	.199	10.415 ^a	.580
Pay my utility bills	3.814a	.987	1.635a	.802	6.579a	.884	7.999a	.949	18.099a	.113
Discounts, cash backs, offers are very useful in using digital payment	11.821ª	.460	6.025ª	.197	7.287ª	.838	54.976ª	.000	13.965ª	.303

In above table 1.5 association between demographic variables of the respondents and perceived usefulness of digital payments has been tested by using chi-square test. When age is compared with the factors of perceived usefulness of digital payments, it is found that the factors of view account summary and check balance (.878), view and download bank account statements (.176), transferring money using NEFT (.729), transferring using RTGS (.023), transferring money using IMPS/UPI (.654), use of Debit/Credit card for purchasing (.654), using point of sale (.870), pay utility bills (.987) and discounts, cash backs, offers are very useful in using digital payment (.460) are not statistically significant at 0.05 significant level. Therefore, there is no significant association between age of the respondents and perceived usefulness of digital payments and the null hypothesis is accepted.

Similarly when marital status is compared with the factors of perceived usefulness of digital payments, it is found that the factors of view account summary and check balance (.306), view and download bank account statements (.362), transferring money using NEFT (.417), transferring money using IMPS/UPI (.762), transferring using RTGS (.627), use of Debit/Credit card for purchasing (.427), using point of sale (.704), pay utility bills (.802) and discounts, cash backs, offers are very useful in using digital payment (.197) are not statistically significant at 0.05 significant level. Therefore, there is no significant association between marital status of the respondents and perceived usefulness of digital payments and the null hypothesis is accepted.

When educational qualification is compared with the factors of perceived usefulness of digital payments, it is found that the factors of view account summary and check balance (.615), view and download bank account statements (.237), transferring money using NEFT (.206), transferring money using IMPS/UPI (.946), transferring using RTGS (.245), use of Debit/Credit card for purchasing (.004), using point of sale (.805), pay utility bills (.884) and discounts, cash backs, offers are very useful in using digital payment (.838) are not statistically significant at 0.05 significant level. Therefore, there is no significant association between educational qualification of the respondents and perceived usefulness of digital payments and the null hypothesis is accepted.

Likewise when occupation is compared with the factors of perceived usefulness of digital payments, it is found that the factors of view account summary and check balance (.011), view and download bank account statements (.028), transferring money using NEFT (.771), transferring money using IMPS/UPI (.019), transferring using RTGS (.018), use of Debit/Credit card for purchasing (.985), using point of sale machine (.199), pay utility bills (.949) and discounts, cash backs, offers are very useful in using digital payment (.000) are statistically significant at 0.05 significant level. Therefore, there is a no significant association between occupation of the respondents and perceived usefulness of digital payments and the null hypothesis is rejected and the alternative hypothesis is accepted.

When monthly income is compared with the factors of perceived usefulness of digital

payments, it is found that the factors of view account summary and check balance (.005), view and download bank account statements (.294), transferring money using NEFT (.007), transferring money using IMPS/UPI (.972), transferring using RTGS (.072), use of Debit/Credit card for purchasing (.119), using point of sale (.580), pay utility bills (.113) and discounts, cash backs, offers are very useful in using digital payment (.303) are not statistically significant at 0.05 significant level. Therefore, there is no significant association between monthly income of the respondents and perceived usefulness of digital payments and the null hypothesis is accepted.

5.4 One way ANOVA test between demographic variables of the respondents with perceived

usefulness of digital payments

userumess of digital payments										
	Age		Marital	status	Educati	onal	Occupa	tion	Monthl	y
					status				income	
	F	Sig.	F	Sig.	F	Sig.	F	Sig.	F	Sig.
	value	value	value	value	value	value	value	value	value	value
View account summary and check balance	.554	.646	.227	.634	1.708	.169	2.284	.044	4.392	.006
View and download bank account statements	1.688	.173	1.065	.304	1.962	.124	3.400	.011	2.195	.092
Transferring money using NEFT	.617	.606	.248	.619	1.294	.280	.493	.741	.636	.593
Transferring money using RTGS	2.495	.063	1.047	.308	1.055	.371	3.057	.020	1.084	.359
Transferring money using IMPS/UPI	1.718	.167	.451	.503	.707	.550	2.405	.049	.357	.784
Use of Debit/Credit cards for purchasing	.371	.774	.196	.659	3.073	.031	.194	.941	3.364	.021
Using point of sale machine	.734	.534	.131	.718	.348	.791	1.416	.233	.309	.819
Pay my utility bills	1.183	.319	.001	.974	.643	.589	2.759	.045	1.666	.178
Discounts, cash backs, offers are very useful in using digital payment	4.593	.004	.604	.439	1.096	.354	3.917	.005	.804	.494

In above table 1.6 relationship between demographic variables of the respondents and perceived usefulness of digital payments has been tested by using one way ANOVA tool. When age is compared with the factors of perceived usefulness of digital payments, it is found that the factors of view account summary and check balance (.646), view and download bank account statements (.173), transferring money using NEFT (.606), transferring using RTGS (.063), transferring money using IMPS/UPI (.167), use of Debit/Credit card for purchasing (.774), using point of sale (.534), pay utility bills (.319) and discounts, cash backs, offers are very useful in using digital payment (.004) are not statistically significant at 0.05 significant level. Therefore, there is no significant relationship between age of the respondents and preceded usefulness of digital payments and the null hypothesis is accepted.

When marital status is compared with the factors of perceived usefulness of digital payments, it is found that the factors of view account summary and check balance (.634), view and download bank account statements (.304), transferring money using NEFT (.619), transferring using RTGS (.308), transferring money using IMPS/UPI (.503), use of Debit/Credit card for purchasing (.659), using point of sale (.718), pay utility bills (.974) and

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discounts, cash backs, offers are very useful in using digital payment (.439) are not statistically significant at 0.05 significant level. Therefore, there is no significant relationship between marital status of the respondents and perceived usefulness of digital payments and the null hypothesis is accepted.

Similarly when educational qualification is compared with the factors of perceived usefulness of digital payments, it is found that the factors of view account summary and check balance (.169), view and download bank account statements (.124), transferring money using NEFT (.280), transferring using RTGS (.371), transferring money using IMPS/UPI (.550), use of Debit/Credit card for purchasing (.031), using point of sale (.791), pay utility bills (.589) and discounts, cash backs, offers are very useful in using digital payment (.354) are not statistically significant at 0.05 significant level. Therefore, there is no significant relationship between educational qualification of the respondents and perceived usefulness of digital payments and the null hypothesis is accepted.

When occupation is compared with the factors of perceived usefulness of digital payments, it is found that the factors of view account summary and check balance (.044), view and download bank account statements (.011), transferring money using NEFT (.741), transferring using RTGS (.020), transferring money using IMPS/UPI (.049), use of Debit/Credit card for purchasing (.941), using point of sale (.233), pay utility bills (.045) and discounts, cash backs, offers are very useful in using digital payment (.005) are statistically significant at 0.05 significant level. Therefore, there is significant relationship between occupation of the respondents and perceived usefulness of digital payments and the null hypothesis is rejected and the alternative hypothesis is accepted.

While comparing monthly income with the factors of perceived usefulness of digital payments, it is found that the factors of view account summary and check balance (.006), view and download bank account statements (.092), transferring money using NEFT (.593), transferring using RTGS (.359), transferring money using IMPS/UPI (.784), use of Debit/Credit card for purchasing (.021), using point of sale (.819), pay utility bills (.178) and discounts, cash backs, offers are very useful in using digital payment (.494) are not statistically significant at 0.05 significant level. Therefore, there is no significant relationship between monthly income of the respondents and perceived usefulness of digital payments and the null hypothesis is accepted.

6. Findings

Self-Efficacy: The study identifies that self-efficacy plays a crucial role in an individual's confidence and motivation to engage with digital payment technologies.

Perceived Usefulness: Women's perception of the usefulness of digital payment technologies is affected by various factors, including their occupation and monthly income. Occupation exhibited a statistically significant relationship with specific functionalities of digital payments, such as viewing account summaries and transferring money using specific methods. Monthly income had negligible impact on perceived usefulness for most functionalities.

Demographic Variables: Age, marital status, and educational level did not show a significant *Nanotechnology Perceptions* Vol. 20 No.6 (2024)

association with perceived usefulness of digital payments. The factors relating to perceived usefulness were notably significant with respect to occupation, particularly in the context of acquiring financial benefits like discounts and cash backs.

Behavioural Intentions and Usage Behaviour: Respondents expressed a willingness to continue using digital payment platforms, driven by perceived security and user-friendliness. However, the findings indicate varying levels of engagement based on socio-economic factors.

7. Suggestion:

Conduct In-depth Interviews: Engage with women from diverse socio-economic backgrounds to understand the barriers, motivations, and usage patterns of digital payment systems.

Examine Accessibility Factors: Assess how access to smartphones, internet connectivity, and digital literacy programs impact women's engagement with digital payments.

Focus on Trust and Security: Investigate concerns related to the security of digital transactions, and how these concerns influence the frequency and type of digital payment methods used by women.

Explore Financial Independence: Study how the use of digital payments is linked to women's financial independence, empowerment, and involvement in household financial decisions.

Highlight Demographic Influences: Analyse the influence of age, educational level, occupation, and geographic location on women's usage of digital payment systems.

Identify Popular Payment Methods: Identify which digital payment methods (e.g., UPI, e-wallets, mobile banking) are most preferred among women, and why they favor these platforms.

Investigate Cultural and Social Norms: Explore how cultural norms and societal expectations shape women's acceptance and use of digital payments.

Look at Government Initiatives: Evaluate the effectiveness of government programs designed to encourage women's financial inclusion through digital payments.

Examine Impact of COVID-19: Assess how the COVID-19 pandemic has influenced women's adoption of digital payments, particularly in rural and semi-urban areas.

Recommendations for Improvement: Suggest ways to improve digital payment systems to make them more accessible and user-friendly for women, such as enhancing customer support and designing gender-sensitive marketing strategies.

8. Conclusion

The study concludes that while women's perceptions of digital payments are generally positive, their engagement is significantly influenced by occupational status. There is a need *Nanotechnology Perceptions* Vol. 20 No.6 (2024)

for digital payment platforms to enhance user experience and improve security measures to encourage greater adoption among women, particularly in lower-income brackets. Additionally, efforts to promote digital financial literacy are critical to building confidence and encouraging more widespread use of digital payment technologies.

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