
Digital Transformation for Social Inclusion: Role of Social Media, Promoting Digital Payment System in West Bengal

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Abstract

The sole purpose of the media is to share information on current affairs, news and entertainment. In this era of digitization, sharing, promoting and usage of Digital Payment System in the open marketplace is essential for the audience. The main objective of promoting the digital payment system is to create awareness among the people especially in rural areas and ensure they are conscious of the advantages of digital payment services and understand the importance of converting the country into a cashless economy. In the last decade of contemporary era, social and economical engagement has been evolved through Information and Communication Technology (ICT). The serving administration, NPCI happens to coordinate with RBI and public representatives to spread awareness of e-payment services by organizing different programs through television, radio, newspaper, camps, digital-marathons and rallies along with social media related online campaigns and advertisements. People are alarmed about security concerns related to online payments such as fraudulent misuse of payment networks and data theft. The research aimed to understand the role of social media to promote the Digital Payment System initiated by the government for secure and seamless transactions. A survey through questionnaire was conducted in Kolkata to know how the media delivers information to promote awareness regarding the e-payment system and help the government with successful implementation by making social inclusion.

Keywords: digital payment, promotion, social media, social inclusion, government's initiative, West Bengal

1. Introduction

Life in India has changed significantly over the last decade, particularly in the rural areas, as a result of the implementation of new payment technologies. The establishment of UPI-based apps mostly through mobile media, the impact of social and cultural interaction started shifting into a new public setting. The use of

smart phones has changed significantly in West Bengal as an outcome of advances in information and communication technology (ICT). Social media has added multiple stars in promoting and advertising digital payment across the state through various means, namely by digital advertisements and campaigns among both rural and urban Bengal. Initiatives by both Central and the State Govt. has added value to the cause of promoting digital payment through several social media campaigns which has helped in educating the mass about the importance and ease of using Digital Payment System.

The promotion of the digital payments ecosystem is an important part under Digital India program, which aims to digitize the financial sector and economy, resulting in increased 'efficiency, transparency, and quality'. According to Ministry of Electronics and Information Technology (MeitY), the growth of using digital payment services is increasing by 5554cr (FY 2020-2021) from 2071cr (FY 2017-2018). Till 20th March, 2022 (FY 2021-2022), the number of online transaction has been increased by 8193cr.^[1]

For secure and seamless money transaction, Reserve Bank of India issued Master Direction Guideline on 2017 to regulate the operation of mobile wallets by reflecting the sensitivity of information involved into digital transactions as well as consequences of the users. To prevent fraud and money laundering, the governing administration, National Payments Corporation of India (NPCI) strengthened laws through UPI Procedural Guidelines, through which every organizations can get involved with different banks.^[2]

2. Review of literature

Users can pay for goods and services using their mobile devices through mobile wallet (Bodhani, 2011).^[3] Consumer-to-consumer, consumer-to-business, consumer-to-online, and consumer-to-machine transactions are all made easier with a mobile wallet (Shin, 2009).^[4] A mobile wallet combines multiple payment methods into a single application (Ma and Yi, 2012).^[5] According to evidence, widespread use of mobile wallets could lead to cashless societies in the future (Bodhani, 2011).^[3] Cost, convenience, context, ease of use, expressiveness, mobility, network externalities, privacy, risk, security, social influence, speed of transaction, system quality, trust, and usefulness are some of the factors that influence user adoption of mobile wallets (Dehlberg *et al.*, 2008).^[6] Money transfer through mobile wallets has impacted on personal, social, and cultural relationships (Fang *et al*, 2017).^[7] Globally, social media is became a boom for sharing information (Xiang and Gratzel, 2010),^[8] sharing opinion (Valenzuela, 2013)^[9] and relations with the public (Eyrich *et al.*, 2008).^[10] In the last decade, every business leaders are already using social media for marketing in this span of digital economy (Thakeray *et al.*, 2008),^[11] building brand image (Kim and Ko, 2012),^[12] promoting product and services (Neiger *et al.*, 2012)^[13] and customer involvement (Baird and Parasnis, 2011).^[14] Active user participation is critical to an online community's success and survival (Grover and Kar, 2020).^[15] The continuous exchange of information within an online community encourages user participation and builds user trust (Choraria, 2012).^[16] As a matter of fact, the authors of the study suggest that a firm's online presence can be improved by paying enough attention to customer reviews

(Mangold and Faulds, 2009)^[17] and if possible, encouraging users to promote the firm on social networking sites(Dahlberg *et al.*, 2006).^[18]

3. Objectives

- To study the role social media advertisements to promote Digital payment system and e-wallets in West Bengal
- To know how much social media influencing the audience to adopt e-payment system in West Bengal
- To identify government’s initiative to promote digital payment system for social inclusion

4. Methodology

An interview schedule has been designed with the objectives in mind for data collection, in order to determine awareness regarding e-payment after getting information through social media advertisements. The survey was carried out with the aid of a questionnaire. A total of 425 people from Kolkata area in West Bengal were chosen to participate in the survey. Cross tabulation and chi-square were used to analyze the data. To identify the initiatives has been taken by the government to promote digital payment system; secondary data has been collected through websites, news articles and research papers.

5.1. Findings and analysis

5.1.1. Getting information through Facebook advertisements

		Facebook Ads		Total	
		No	Yes		
Residence	Rural	Count	2	2	4
		% within Q Residence	50.0%	50.0%	100.0%
		% within Q Getting information regarding Digital payment system and e-wallets through Facebook Ads	4.8%	0.5%	0.9%
	Sub-Urban	Count	1	4	5
		% within Q Residence	20.0%	80.0%	100.0%
		% within Q Getting information regarding Digital payment system and e-wallets through Facebook Ads	2.4%	1.0%	1.2%
	Urban	Count	39	377	416
		% within Q Residence	9.4%	90.6%	100.0%

	% within Q Getting information regarding Digital payment system and e-wallets through Facebook Ads	92.9%	98.4%	97.9%
Total	Count	42	383	425
	% within Q Residence	9.9%	90.1%	100.0%
	% within Q Getting information regarding Digital payment system and e-wallets through Facebook Ads	100%	100%	100%

Table 5.1.1. Data regarding residence and Facebook advertisements

The given table shows about getting information about digital payment services and e-wallets through social media that is Facebook advertisements. Among 425 respondents from Kolkata, 383 respondents viewed advertisements in Facebook and 42 respondents didn't get any information regarding Digital Payment services. From the calculation it is shown that, 50% audience of rural area, 80% audience from sub-urban area and 90.6% beneficiaries came across advertisements regarding online payment services in Facebook.

Chi-Square Test

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	7.924^a	2	.019

a. 4 cells (66.7%) have expected count less than 5. The minimum expected count is .40.

Table critical value 2 df – 5.99 @ 0.5 level of significance

Ho – There is no relatable connection between the residential area and the Facebook from where the respondents got information regarding digital payment system and e-wallets

Ha - There is a relatable connection between residential area and the Facebook from where the respondents got information regarding digital payment system and e-wallets

The question is related to Facebook advertisements regarding Digital Payment services and e-wallets from where the audiences got information. The analyzed data has revealed that the calculated value of 7.924 is higher than the table critical value of 5.99 @ 0.05 level of significance for 2 df. Thus, the null hypothesis of there is no relatable connection between the residential area and the Facebook from where the respondents got information regarding digital payment system and e-wallets is rejected. This indicates that the place where the respondents reside, an independent variable is associated with the respondent knowledge about the information of online payment services through social media.

5.1.2. Getting information through Instagram advertisements

	Instagram Ads	Total
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			No	Yes	
Residence	Rural	Count	4	0	4
		% within Q Residence	100.0%	0.0%	100.0%
		% within Q Getting information regarding Digital payment system and e-wallets through Instagram Ads	2.1%	0.0%	0.9%
	Sub-Urban	Count	3	2	5
		% within Q Residence	60.0%	40.0%	100.0%
		% within Q Getting information regarding Digital payment system and e-wallets through Instagram Ads	1.6%	0.9%	1.2%
	Urban	Count	184	232	416
		% within Q Residence	44.2%	55.8%	100.0%
		% within Q Getting information regarding Digital payment system and e-wallets through Instagram Ads	96.3%	99.1%	97.9%
Total	Count	191	234	425	
	% within Q Residence	44.9%	55.1%	100.0%	
	% within Q Getting information regarding Digital payment system and e-wallets through Instagram Ads	100%	100%	100%	

Table 5.1.2. Data regarding residence and Instagram advertisements

The given table shows about getting information about digital payment services and e-wallets through social media that is Instagram advertisements. Among 425 respondents from Kolkata, 234 respondents viewed advertisements in Instagram and 191 respondents didn't get any information regarding Digital Payment services. From the calculation it shows that, 40% audience from sub-urban area and 55.8% beneficiaries came across advertisements regarding online payment services in Instagram.

Chi-Square Test

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	5.444 ^a	2	.066

a. 4 cells (66.7%) have expected count less than 5. The minimum expected count

is 1.80.

Table critical value 2 df – 5.99 @ 0.5 level of significance

Ho – There is no relatable connection between the residential area and the Instagram from where the respondents got the information regarding digital payment system and e-wallets

Ha - There is a relatable connection between the residential area and the Instagram from where the respondents got information regarding digital payment system and e-wallets

The question is related to Instagram advertisements regarding Digital Payment services and e-wallets from where the audiences got information. The analyzed data has revealed that the calculated value of 5.444 is lower in compare to the table critical value of 5.99 @ 0.05 level of significance for 2 df. Thus, the alternative hypothesis of there is a relatable connection between the place and the Instagram from where the respondents got information regarding digital payment system and e-wallets is failed to reject null hypothesis. This indicates that place a dependent variable is not influenced with the respondent knowledge about the information of online payment services through Instagram.

5.1.3. Getting information through Twitter advertisements

			Twitter Ads		Total
			No	Yes	
Residence	Rural	Count	3	1	4
		% within Q Residence	75.0%	25.0%	100.0%
		% within Q Getting information regarding Digital payment system and e-wallets through Twitter Ads	0.9%	1.0%	0.9%
	Sub-Urban	Count	3	2	5
		% within Q Residence	60.0%	40.0%	100.0%
		% within Q Getting information regarding Digital payment system and e-wallets through Twitter Ads	0.9%	2.0%	1.2%
	Urban	Count	321	95	416
		% within Q Residence	77.2%	22.8%	100.0%
		% within Q Getting information regarding Digital payment system and e-wallets through Twitter Ads	98.2%	96.9%	97.9%
Total	Count	327	98	425	
	% within Q Residence	76.9%	23.1%	100.0%	
	% within Q Getting information regarding Digital payment system and e-wallets through Twitter Ads	100%	100%	100%	

Table 5.1.3. Data regarding residence and Twitter advertisements

The given table shows about getting information about digital payment services and e-wallets through social media that is Twitter advertisements. Among 425 respondents from Kolkata, 98 respondents viewed advertisements in Twitter and 327 respondents didn't get any information regarding Digital Payment services. From the calculation it shows that, 25% audience from rural area, 40% beneficiaries from sub-urban area and 22.8% beneficiaries came across advertisements regarding online payment services in Twitter.

Chi-Square Tests

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	.829 ^a	2	.661

a. 4 cells (66.7%) have expected count less than 5. The minimum expected count is .92.

Table critical value 2 df – 5.99 @ 0.5 level of significance

Ho - There is no relatable connection between the residential area and the Twitter from where the respondents got information regarding digital payment system and e-wallets

Ha - There is a relatable connection between the residential area and the Twitter from where the respondents got information regarding digital payment system and e-wallets

The question is related to Twitter advertisements regarding Digital Payment services and e-wallets from where the audiences got information. The analyzed data has revealed that the calculated value of .829 is lower in compare to the table critical value of 5.99 @ 0.05 level of significance for 2 df. Thus, the alternative hypothesis of there is a relatable connection between the place and the Twitter from where the respondents got information regarding digital payment system and e-wallets is failed to reject null hypothesis. This indicates that place a dependent variable is not influenced with the respondent knowledge about the information of online payment services through Twitter.

5.1.3. Getting information through YouTube advertisements

		Q Where did you get information about Digital payment system and e-wallets? (Social Media) [YouTube Ads]		Total	
		No	Yes		
Q Residence	Rural	Count	0	4	4
		% within Q Residence	0.0%	100.0%	100.0%
		% within Q Where did you get information about Digital payment system and e-wallets? (Social Media) [YouTube Ads]	0.0%	1.1%	0.9%

	Sub-Urban	Count	2	3	5
		% within Q Residence	40.0%	60.0%	100.0%
		% within Q Where did you get information about Digital payment system and e-wallets? (Social Media) [YouTube Ads]	4.2%	0.8%	1.2%
	Urban	Count	46	370	416
		% within Q Residence	11.1%	88.9%	100.0%
		% within Q Where did you get information about Digital payment system and e-wallets? (Social Media) [YouTube Ads]	95.8%	98.1%	97.9%
Total	Count	48	377	425	
	% within Q3 Residence	11.3%	88.7%	100.0%	
	% within Q9_A_4 Where did you get information about Digital payment system and e-wallets? (Social Media) [YouTube Ads]	100.0%	100.0%	100.0%	

Table 5.1.4. Data regarding residence and YouTube advertisements

The given table shows about getting information about digital payment services and e-wallets through social media that is YouTube advertisements. Among 425 respondents from Kolkata, 377 respondents viewed advertisements in YouTube and 48 respondents didn't get any information regarding Digital Payment services. From the calculation it shows that, 100% audience from rural area, 60% beneficiaries from sub-urban area and 88.9% beneficiaries came across advertisements regarding online payment services in YouTube.

Chi-Square Tests

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	4.645 ^a	2	.098

a. 4 cells (66.7%) have expected count less than 5. The minimum expected count is .45.

Table critical value 2 df – 5.99 @ 0.5 level of significance

Ho – There is no relatable connection between the place and the YouTube advertisements from where the respondents got information regarding digital payment system and e-wallets

Ha - There is a relatable connection between the place and the YouTube advertisements from where the respondents got information regarding digital payment system and e-wallets

The question is related to YouTube advertisements regarding Digital Payment services and e-wallets from where the audiences got information. The analyzed data has revealed that the calculated value of 4.645 is lower in compare to the table critical value of 5.99 @ 0.05 level of significance for 2 df. Thus, the alternative hypothesis of there is a relatable connection between the place and the You tube from where the respondents got information regarding digital payment system and e-wallets is failed to reject null hypothesis. This indicates that place a dependent variable is not influenced with the respondent knowledge about the information of online payment services through YouTube.

5.2.Government's initiative to promote Digital Payment System

MeitY has been adopted various steps to promote digital payment services for social inclusion and spreading awareness.^[1]

- I. MeitY has launched an incentive scheme to promote RuPay Debit cards and low-value BHIM-UPI transactions in the country. This scheme assists banks in developing a strong digital payment ecosystem, promoting RuPay Debit card and BHIM-UPI digital transactions across all sectors.
- II. A number of other incentives and cash back schemes has been launched in order to change customer/merchant behavior and accelerate the adoption of digital payments.
- III. Advisories has been issued to central ministries and states/UTs to improve payment acceptance infrastructure, allowing citizens to pay using a variety of methods such as Internet banking, mobile banking, and mobile applications.
- IV. To promote digital literacy in rural India, "Pradhan Mantri Gramin Digital Saksharta Abhiyan (PMGDISHA)" scheme has been launched.
- V. All banks and payment service providers have been advised to conduct awareness campaigns to promote secure payment practices and raise information security awareness.
- VI. To promote digital payments, MeitY also ran newspaper, digital theatre, FM radio, and hoarding campaigns.
- VII. To encourage citizens to adopt digital payments, a variety of promotion and awareness campaigns have been launched, utilizing both traditional and emerging media such as social media platforms.
- VIII. The government and the Reserve Bank of India have taken a number of steps to ensure the safety and security of digital payments.

6. Conclusion

Information and communication technologies (ICT) keep spreading at breakneck speed around the world. One of the most important periods of transformation in India's history is digitization. The Digital India program aims to connect rural areas to high-speed 3G/4G networks and powerful internet connectivity via mobile devices, as well as improve digital literacy among them.

With collaboration of other mobile wallet players, NPCI launched a campaign of “UPI Chalega” by promoting UPI as simple, secure and easy payment method. According to institution, the main objective of the campaign is to guide users toward proper UPI usage and to help them develop a habit of using mobile wallets in their daily lives. The campaign also emphasizes the importance of security when transacting on UPI-enabled applications.^[19] Though there is sufficient ICT infrastructure in Kolkata, and state government as well as private organizations trying to promote digital payment systems through different media, the impact of social media is more influenced to the audience as social networking sites emerged effectively in every aspect of human life.

References

1. Promotion of Digital Payments. Ministry of Electronics & Information Technologies. <https://pib.gov.in/PressReleasePage.aspx?PRID=1809544>
2. Arora, A. (October, 2019). Digital Payments: The Regulatory Framework in India. *Article in iPleaders- Intelligent Legal Solutions*. https://blog.iplayers.in/digital-payments/#_ftn6
3. Bodhani, A. (2011). Smartphones pay the price. *Engineering & Technology*, 6(10), 56-59.
4. Shin, D. H. (2009). Towards an understanding of the consumer acceptance of mobile wallet. *Computers in Human Behavior*, 25(6), 1343-1354.
5. Ma, G., & Yi, J. H. (2012). Design and Implementation of smart channel establishment schemes for mobile wallet services. *Advanced Science Letters*, 9(1), 579-584.
6. Dahlberg, T., Mallat, N., Ondrus, J., & Zmijewska, A. (2008). Past, present and future of mobile payments research: A literature review. *Electronic commerce research and applications*, 7(2), 165-181.
7. Fang, J., Russell, R., & Singh, S. (2014). Exploring the impact of mobile money services on marketing interactions in relation to consumer well-being in subsistence marketplaces—lessons from rural Cambodia. *Journal of Marketing Management*, 30(5-6), 445-475.
8. Xiang, Z., & Gretzel, U. (2010). Role of social media in online travel information search. *Tourism management*, 31(2), 179-188.
9. Valenzuela, S. (2013). Unpacking the use of social media for protest behavior: The roles of information, opinion expression, and activism. *American behavioral scientist*, 57(7), 920-942.
10. Eyrich, N., Padman, M. L., & Sweetser, K. D. (2008). PR practitioners’ use of social media tools and communication technology. *Public relations review*, 34(4), 412-414.
11. Thackeray, R., Neiger, B. L., Hanson, C. L., & McKenzie, J. F. (2008). Enhancing promotional strategies within social marketing programs: use of Web 2.0 social media. *Health promotion practice*, 9(4), 338-343.
12. Kim, A. J., & Ko, E. (2012). Do social media marketing activities enhance customer equity? An empirical study of luxury fashion brand. *Journal of Business research*, 65(10), 1480-1486.

13. Neiger, B. L., Thackeray, R., Van Wagenen, S. A., Hanson, C. L., West, J. H., Barnes, M. D., & Fagen, M. C. (2012). Use of social media in health promotion: purposes, key performance indicators, and evaluation metrics. *Health promotion practice, 13*(2), 159-164.
14. Baird, C. H., & Parasnis, G. (2011). From social media to social customer relationship management. *Strategy & leadership*.
15. Grover, P., & Kar, A. K. (2020). User engagement for mobile payment service providers—introducing the social media engagement model. *Journal of Retailing and Consumer Services, 53*, 101718.
16. Choraria, S. (2012). Factors determining the flow of information among the online community users. *Journal of Systems and Information Technology*.
17. Mangold, W. G., & Faulds, D. J. (2009). Social media: The new hybrid element of the promotion mix. *Business horizons, 52*(4), 357-365.
18. Dahlberg, T., Mallat, N., Ondrus, J., & Bachfischer, A. (2006). Mobile payment market and research-past present and future. *Helsinki mobility roundtable*.
19. 'UPI Chalega' campaign mobile-led digital payments.(February 24, 2020) ET BRANEQUITY.com <https://brandequity.economictimes.indiatimes.com/news/marketing/upi-chalega-campaign-promotes-mobile-led-digital-payments/74279302>