

RESEARCH ARTICLE

A study on impact of digital wallets on small-income business groups with reference to KGF

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The development of wireless technology has been facilitated for an immense rise in mobile device users and paved way for the rapid growth of e-commerce in India. It has performed through wireless telecommunication networks and other wired e-commerce technologies. Instead of cash, cheque, or credit or debit cards, payments are made via mobile devices. The customer generally makes the payment for a wide range of services and digital or hard goods. The mobile payment acts as a business tool substituting the need of banks, ATM, and credit or debit cards by enabling the user to make financial transactions with digital money. A user ready to purchase a good or service from a seller, through mobile payment service, is introduced to a trusted third party; it allows the user to make payment from his account to another account. Thus, there is free movement of mobile money between users either by using a local area wireless network or by using the wireless service provider's network. The Indian Government also supports various digital payment apps such as Aadhaar payment app, UPI app, and Bharat Interface for Money app, along with private sector apps like Paytm, free charge, mobikwik, and so on. Such new apps are helpful to transfer funds across various parts of our country. This study provides spotlight on the impacts of digital wallets on small-income business groups who operate in every nook and cranny, and what services are offered by the mobile payment system and utilization and awareness levels of services offered by the mobile payment system (1).

Keywords: digital wallets, Google Pay, Phone Pay, mobile wallets, cashless economy

Introduction

Almost all our attention has changed to online, face-to-face conversation from the very beginning of the digital era in India.

Digital wallet has become the most happening trend post the demonetization, which is set to be the most revolutionary step taken by the Indian Government.

We all know the usage of smartphones is growing rapidly in India and this growth is directly contributed to the digital wallet systems, making them more popular. India had 750 million active smartphone users in 2021.

A few years back, digital wallets were utilized by limited people. Though they are essential, people are stepping back due to lack of awareness, security, and dependence on cash. But the trend has changed; now, everyone is adapted to digital

wallets. The digital wallet payment system also provides various services to the users, and the users are benefited by availing discounts, rewards, and cashback. Hence, present research is targeted to look into the impacts of digital wallets on small-income business groups with reference to KGF. This study will come up with valuable insights to the adaptability of digital wallets in small-income business groups and the impacts on the business (2).

Mobile wallet

Mobile wallets are known as M wallets or currently called as digital wallets; they are a software design to enable the individual to make ecommerce transactions through digital wallets. With the help of smartphones and tablets

and computers, they make the e-transactions easier; they are used not only for online payment and purchase but also for authentication of users; it archives the complete data of users and transaction history and personal details including credentials.

Digital wallet payment systems

Phone pe

Phone pe is a digital payment platform that runs on the UPI system; one needs to enter the bank account details and create a UPI ID. We do not have to reload the wallet as the money is safely withdrawn from our bank account with just a click. UPI is considered to be best as it is available at any time even on holidays and weekends; phone pe can be downloaded on Android and Apple phones. Based on the UPI, it is the first payment application. On 26 August 2014, the operating license was received by FxMart. Following in 2016, Flipkart took over this company. FxMart license was transferred to phone pe as part of Flipkart purchase and was renamed as phone pe wallet. In August 2016, the company made a collaboration with Yes Bank to launch a UPI-based mobile payment application.

Further in September 2019, to merge several other commercial applications, phone pe introduced phone pe switch; it enables users for easier switching between phone pe and other applications. The phone pe is used by 350 million users, and it is grown by 28% when compared to the last year.

Google Pay

Google Pay, commonly known as Gpay or Pay with Google, is a special type of digital wallet and online payment system. Google Wallet and Android Pay merged in January 2018 and were given the new Google Pay moniker. In India, Google launched TEZ in September 2017. Later, it changed its name to Google Pay. Digital wallets have been available in India for a month, and Google Pay has over 25 million active users. All transactions on Google are safe and secure.

We can send and receive money with Google, securely save our credit and debit card information, and use that information to make purchases in a variety of apps. Known for the security of other similar digital payment applications, Google Pay stores our credit/debit card information in Google's secure services that use powerful encryption, cloud storage, and customer data protection.

Paytm

Indian e-commerce and fintech business Paytm. The startup introduced Paytm Wallet, the first digital e-wallet, in 2014.

Paytm offers online shopping, smartphone payments, and Paytm payments to banks and other services.

Paytm got a license from RBI in 2015, after which then Finance Minister Shri Arun Jaitley launched Paytm Payments Bank.

Two ways Paytm works are through its wallet and its own payment bank.

With Paytm, a digital payment system, we can transfer money and do online banking transactions using our debit or credit card. Once we register with Paytm, we can pay bills online or through our Paytm wallet by first loading money into our wallet.

WhatsApp Pay

WhatsApp pay has a feature of chat payment. That allows the user to send the money to their contacts through WhatsApp; it is UPI-based.

That allows the user to receive and send the money.

The National Payments Corporation of India developed the WhatsApp pay.

Literature review

As viewed by Dr. S. Manikandan and J. Mary jayakodi. The research project titled "Experimental Study on Consumer Adoption of Mobile Wallet with Special Reference to Chennai City" aims to explain how mobile wallets are being used and the difficulties faced by consumers while using various mobile wallets that affect consumers, with mobile wallet approval decisions. This article summarizes how brand loyalty and shopping convenience influence customers' adoption of e-wallets (3).

According to Schierz et al.

In this study, she has examined and claimed the consumer acceptance of mobile payment services was the important driver by compatibility; they suggest that digital payment services should be evolved and advertised, so the consumer regarded them suitable for their own individual behavior patterns and experience gained in past.

As stated by Bhatia and Chatterjee

This research paper study is on financial inclusion in the slums of Mumbai. It is discovered that although financial inclusion refers to the actions of allowing access to useful banking services at a usual price to an underserved, marginalized, and below-poverty population, it has still a far way to go becoming a reality in the urban people.

According to Singh and Gupta

The title which they explored is "The factors influencing on the adoption of mobile wallets payment among customers." The variables for the study are convenience, trust, security, and adaptability, which had affected the satisfaction level of

mobile wallets for customers. The study result shows that mobile wallets are considered as the future of cash.

Michael Van Bossuyt and Leo van Hove

The title is mobile payment models and their implications for the next generation. In this article, they discussed about the future applications and services of existing mobile wallets and examined the suitability of existing cellular payment models and enhancement of future growth in the mobile wallets.

Statement of the problem

The world has become more rapidly digitalized in the recent years. One of the most digitalized forms, which has grabbed attention in the market after demonetization, is the mobile wallet, though it is essential that people step back due to lack of awareness, security constrain, dependence on cash, and more, so this study is important to know what services are used through mobile wallets in the small-income business groups and utilization and awareness levels of digital wallets in small-income business groups.

Objectives

- To study the various utilities of digital or mobile wallets.
- To examine the impact of digital wallets on small-income business groups.
- To evaluate the awareness level of service offered by mobile payment systems among the small-income business groups.

Research methodology

Research methodology is a profile of how a given small investigation of subject is carried out. It means the techniques or procedure that are used to identify and analyze information regarding a specific research topic.

Methodology

Survey method

The survey method and its nature question the individuals and gather the data or information, through questionnaires and face-to-face interviews; the data extracted via this method are primary data, and techniques used to collect the data are related to a particular topic chosen for the study, and the questionnaire is related to the topic chosen.

Sampling

A sampling method is a process for selecting the digital wallet users from the population. We have collected the data with 141 individuals, and the sample size is 141. The data are collected from convenience sampling. The study is limited to KGF, where the study can further be extended to other areas.

Data analysis

The data are collected through questionnaires from small-income business owners in KGF and interpreted as below.

Interpretation

Based on the type of ownership of small-income business, the above illustration shows the respondents of sole proprietorship are 59 with 41.84%, those of family-owned small business are 55 with a percentage of 39.01, those of partnership firm are 17 with a percentage of 12.06, and those of co-operative society are 10 with 7.09 (Table 1).

Interpretation

As stated in the above illustration, the age of business as per the respondents in the 2–4 years range holds the highest number with 46 with a percentage of 32.62, that in the 5–7 years range shows 41 and 29.08%, that in the 8–10 years range shows 22 and 15.60%, and that in the 11–13 years shows 32, holding the percentage of 22.70. This survey overall means there is a higher number of young emerging entrepreneurs off late (Table 2).

Interpretation

The above-illustrated bar graph shows the data of average number of customers per day. According to 70 respondents, the average number of customers per day was 20–30, which is 49.65%; according to 43 respondents, it is 51–100 customers

TABLE 1 | Type of ownership.

Type of ownership	Respondents	Percentage
Sole proprietorship	59	41.84
Family-owned	55	39.01
Partnership firm	17	12.06
Co-operative	10	7.09
Total	141	100.00

TABLE 2 | Age of the business.

Age of the business	Respondents	Percentage
2 to 4	46	32.62
5 to 7	41	29.08
8 to 10	22	15.60
11 to 13	32	22.70
Total	141	100.00

TABLE 3 | Average number of customers per day.

Average no. of customers per day	Respondents	Percentage
20–50	70	49.65
51–100	43	30.50
Above 100	28	19.86
Total	141	100.00

TABLE 4 | What is the digital wallet you used continuously.

Digital wallet	Respondents	Percentage
Airtel Money	1	0.71
Google Pay	46	32.62
Jio Money	1	0.71
Paytm	35	24.82
Phone Pay	58	41.13
Total	141	100.00

TABLE 5 | Percentage of sales made by using digital payment options in a day.

Sales made by using digital wallet payment	Respondents	Percentage
10%	33	23.40
20%	21	14.89
40%	48	34.04
60%	39	27.66
Total	141	100.00

per day, which is 30.50%; and according to 28 respondents, it is above 100 per day, which is 19.86% (Table 3).

Interpretation

The above illustration shows the usage of digital wallets. According to one respondent, Airtel Money is used at a percentage of 0.71; 46 respondents have said that they use Google Pay at a percentage of 32.62; one respondent uses Jio Money, which is 0.71%; 35 respondents use Paytm at a percentage of 24.82; and finally, 58 respondents have said that they use Phone Pay at the highest percentage of 41.13 (Table 4).

TABLE 6 | Number of times the digital wallet payment option is used in a day.

Digital wallet payment option used in a day	Respondents	Percentage
> 5 times	38	26.95
> 10times	38	26.95
> 15 times	22	15.60
> 20 times	43	30.50
Total	141	100.00
Mean	35.25	
Median	9.1423	
Standard deviation	38	

TABLE 7 | Amount of sales made by using digital wallet payment option in a single transaction.

Sales made by using digital wallet payment in a single transaction	Respondents	Percentage
<500	46	32.62
<1,000	37	26.24
> 2,500	29	20.57
> 5,000	29	20.57
Total	141	100.00

Interpretation

In the above bar graph, the percentage of sales made by using a digital wallet is illustrated. Here, 33 respondents have stated that 10% sales is made using digital wallet payment in a day, 21 respondents said 20% of sales is made, 48 respondents have said 40% of sales is made, and 39 respondents have said 60% of sales is made using digital wallet payments (Table 5).

Interpretation

The above illustration depicts the number of times the digital wallet payment option is used in a day. Here, according to 38 respondents, the digital wallet payment option is used more than 5 times a day, which holds 26.95%; another 38 respondents have stated that it is used more than 10 times a day, which holds 26.95%; 22 respondents say that it is used more than 15 times a day, which is 15.06%; and 43 respondents say it is used more than 20 times a day, which is 30.50% (Table 6).

Interpretation

It is depicted in the above illustration the amount of sales made by using a digital wallet in a single transaction. Here, 46 respondents have said less than Rs 500 of sales is made through digital wallet payment in a single transaction, which

TABLE 8 | Kind of offers that the payment system company had for customers to use digital wallet payment option.

Kind of offers	Respondents	Percentage
Loyalty points	44	31.21
Gift vouchers	51	36.17
Credit for future	26	18.44
Waive any associated charges	1	0.71
Do not provide any offers	19	13.48
Total	141	100.00

TABLE 9 | Effect of digital wallet payment option on business performance.

Impact of digital wallet payment option on business performance	I	II	III	IV	V
Enlarge in sale	11	15	43	40	31
Enhance in profit	9	15	44	34	27
Widen the business through technology	9	13	41	52	26
Increase in no. of customers	9	15	38	43	36
Effective cash management	11	7	30	53	40
Diminishes the operational cost	7	14	49	50	21
More satisfied customer	9	4	42	48	38
Good image to business	11	7	39	58	26
More business at lower time	6	19	39	51	26
High quality of service	6	5	41	51	38

I, strongly disagree; II, Disagree; III, neutral; IV, agree; V, strongly agree.

TABLE 10 | The awareness level of services offered by digital payment systems to small-income business groups.

Awareness level	I	II	III	IV
Digital wallet provides greater flexibility and faster payment options than other options	36	47	44	14
No need for counting/checking the currency when the digital wallet option is used	47	51	37	6
Digital wallet payment system reduces the risk of fake or counterfeit currency received as payment	24	56	49	12
Digital wallet provides the multiple data on purchase	32	47	46	14
Digital wallet ensures consumers a safe/secure purchase	15	47	52	27

I, very high awareness; II, high awareness; III, medium awareness; IV, low awareness.

is 32.62%; 37 respondents have stated that less than Rs 1000 of sales is made, which is 26.24%; 29 respondents have said less than Rs 2500 of sales is made, which is 20.57%; and 29 respondents have stated that less than Rs 5000 of sales is made, which is 20.57% (Table 7).

TABLE 11 | Awareness level toward the services offered in digital wallet payment.

Level of awareness toward the services offered in digital wallet payment	I	II	III	IV
Instant payments and refunds	47	53	41	6
Cash rewards	24	58	51	13
Digital coupons	32	49	48	16
Splitting of bills	15	48	54	27
Easy to connect to other accounts	28	59	42	15
Recharge	31	56	53	5
We can book tickets	38	43	48	12
Mixed with all software	23	58	45	21
Global accessibility	37	52	45	13
24/7 customer service	49	62	28	7

I, very high awareness; II, high awareness; III, medium awareness; IV, low awareness.

TABLE 12 | Awareness level toward the following various digital wallet payment service providers.

Level of awareness toward the following digital wallet payment service providers	I	II	III	IV
Paytm	63	51	24	3
Citrus	4	33	57	47
Recharge	16	43	59	23
Oxigen	9	30	58	44
Google pay	71	48	18	4
PayPal	34	41	50	16
Phonpe	72	44	21	4
Amazon Pay	52	50	33	6
SBI Buddy	17	28	61	35
Airtel money	18	39	60	2

I, very high awareness; II, high awareness; III, medium awareness; IV, low awareness.

Interpretation

The above depicts the kind of offer the payment system company offers to their customers. According to 44 respondents, it is stated that they receive loyalty points as an offer from their payment system company, which is 31.21%; 51 respondents have stated that they receive gift vouchers as an offer, which is 36.17%; 26 respondents have said that they receive credit for future offer, which is 18.44%; 1 respondent has mentioned about waive any associated charges offer, which is 0.71%; and 19 respondents have said that they do not receive any offer, which is 13.48% (Table 8).

Testing of hypothesis

HO: There is no significant relationship of impact of digital wallet payment option on business performance (Table 9).

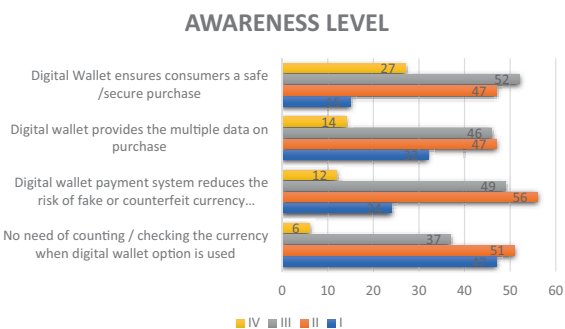


FIGURE 1 | Awareness level.

H1: There is significant relationship of impact of digital wallet payment option on business performance.

Results

Source of variation	SS	df	MS	F	P-value	F crit
ANOVA						
Between groups	25.62	9	2.846667	0.008485	1	2.124029
Within groups	13419.2	40	335.48			
Total	13444.82	49				

Conclusion: Since the P -value is above 0.05, we can conclude from the above data collected that there is no significant relationship between the various factors of digital wallet payment option on business performance.

Interpretation

- The above illustration showcases the awareness level of services offered by digital payment systems to small-income business groups.
- The digital wallet provides greater flexibility and faster payment options than other options. Category 36 respondents have shown very high awareness, 47 have shown high awareness, 44 show medium awareness, and 14 show low awareness (Table 10) (4).
- In “no need for counting/checking the currency when digital wallet option is used,” category 47 respondents show very high awareness, 51 show high awareness, 37 show medium awareness, and 6 respondents show lower awareness (Figure 1).
- In “digital wallet payment system reduces the risk of fake or counterfeit currency received as payment,” category 24 respondents show very high awareness, 56 show high awareness, 49 show medium awareness, and 12 show low awareness.
- In “digital wallet provides the multiple data on purchase category,” 32 respondents show very high

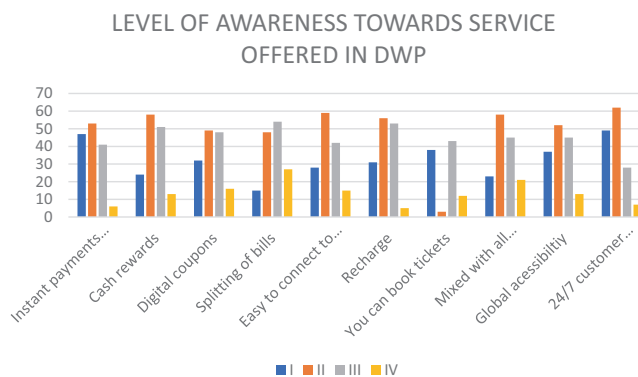


FIGURE 2 | Level of awareness toward service offered in DWP.

awareness, 47 show high awareness, 46 show medium awareness, and 14 show low awareness.

- In “digital wallet ensures consumers a safe/secure purchase category,” 15 respondents are with very high awareness, 47 with high awareness, 52 with medium awareness, and 27 with low awareness (5).

Interpretation

- The above bar graph depicts the awareness level toward the services offered in digital wallet payment.
- In “instant payments and refunds” category, 47 respondents show very high awareness, 53 are with high awareness, 41 with medium awareness, and 6 with low awareness (Table 11).
- In “cash rewards” category, 24 respondents show very high awareness, 58 show high awareness, 51 are with medium awareness, and 13 with low awareness.
- In “digital coupon” category, 32 respondents show very high awareness, 49 with high awareness, 48 with medium awareness, and 16 with low awareness.
- In “splitting of bills” category, 15 people show very high awareness, 48 with high awareness, 54 with medium awareness, and 27 with low awareness.
- In “easy to connect to another accounts,” 28 people show very high awareness, 59 are with high awareness, 42 with medium awareness, and 15 with low awareness
- In “recharge” category, 31 respondents show very high awareness, 56 are with high awareness, 53 with medium awareness, and 5 with low awareness.
- In “you can book tickets,” 38 respondents have shown very high awareness, 43 are with high awareness, 48 with medium awareness, and 12 with low awareness.
- In “mixed with all software,” 23 people show very high awareness, 58 are with high awareness, 45 with medium awareness, and 21 with low awareness.
- In “global accessibility category,” 37 people show very high awareness, 52 are with high awareness, 45 with medium awareness, and 13 with low awareness.
- In “24/7 customer service,” 49 people show very high awareness, 62 are with high awareness, 28 with medium awareness, and 7 people with low awareness (Figure 2).

Interpretation

- The above table depicts the awareness level toward the various digital wallet payment service providers.
- Paytm apps have received 63 with very high awareness, 51 high awareness, 21 medium awareness, and 3 low awareness.
- Citrus app has received 4 with very high awareness, 33 high awareness, 57 medium awareness, and 47 low awareness.
- Recharge app has received 16 with very high awareness, 43 high awareness, 59 medium awareness, and 23 low awareness.
- Oxygen app has received 9 with very high awareness, 30 high awareness, 58 medium awareness, and 44 low awareness.
- Google pay app has received 71 with very high awareness, 48 high awareness, 8 medium awareness, and 4 low awareness.
- PayPal app has received 34 with very high awareness, 41 high awareness, 50 medium awareness, and 16 low awareness.
- Phonepe app has received 72 with very high awareness, 44 high awareness, 21 medium awareness, and 4 low awareness.
- Amazon pay app has received 52 with very high awareness, 50 high awareness, 33 medium awareness, and 6 low awareness.
- SBI yono app has received 17 with very high awareness, 28 high awareness, 61 medium awareness, and 35 low awareness.
- Airtel money app has received 18 with very high awareness, 39 high awareness, 61 medium awareness, and 2 low awareness (Table 12).

Conclusion

Digital wallet is playing a crucial role in the life of common people as there is an immense change in their lifestyle as it assists digital convenience and quick access. In future, mobile wallet will be seen in every sphere of business. The traditional payment is not decreased even after technological developments in the payment system as the customers think that it is not comfortable and safe, even after providing various loyalty points, gifts, vouchers, and UPI codes. The victory of digital payment systems is reliable on customer satisfaction, cost, safety and security, adaptability, authentication, convenience, and accessibility. All these are to be contemplated by the government and digital wallet company for enhancement.

Author contributions

All authors listed have made a substantial, direct, and intellectual contribution to the work, and approved it for publication.

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