Dr.BGR Publications

Impact of Digital Payment System on Street Vendors in Virudhunagar Town

V. Shantha Meena[1]* and C. Amirtha Selvi[2]

[1]*Head and Assistant Professor of Commerce (SF), V.V.Vanniaperumal College for Women, Virudhunagar, Tamil Nadu*

[2]*Head and Assistant Professor of Business Administration (UG), V.V.Vanniaperumal College for Women, Virudhunagar, Tamil Nadu*

*Corresponding Author Email id: shanthameena@vvvcollege.org

Abstract

After demonetization digital transactions increased and the Pradhan Mantri Jan Dhan Yojna was introduced for everyone to open their bank account. There are various methods for digital payments. Some of the platforms for digital payments are debit card, credit card, Net Banking, E-wallets such as phone pay, Google pay, Paytm, Bharat Pay, Amazon pay etc. and RTGS. Now, not only E-Commerce companies but consumers, street vendors, traders and other sectors of societies also prefer digital payments due to its fast and secure transaction facility. On the other hand, limited understanding and adoption of digital payment systems is the main problem among street vendors. It affects their ability to capitalize on the potential benefits of digital transactions. While digital payments can enhance business efficiency, improve financial inclusion, and expand customer reach, many street vendors face challenges. Hence, this study aims to analyze the impact of digital payment system on street vendors.

Keywords: Digital Payment, Vendor, QR code, Digital Divide

Introduction

After demonetization digital transactions increased and the Pradhan Mantri Jan Dhan Yojna was introduced for everyone to open their bank account. There are various methods for digital payments. Some of the platforms for digital payments are debit card, credit card, Net Banking, E-wallets such as, phone pay, Google pay, Paytm, Bharat Pay, Amazon pay etc and RTGS. Now, not only E-Commerce companies but consumers, street vendors, traders and other sectors of societies also prefer digital payments due to its fast and secure transaction facility. On the other hand, limited understanding and adoption of digital payment systems is the main problem among street vendors. It affects their ability to capitalize on the potential benefits of digital transactions.

Review of Literature

1. A study by Sharma and Kukreja (2017) in Delhi revealed that awareness and perceived ease of use were significant factors driving digital payment adoption among street vendors. However, the research also identified barriers such as lack of trust and inadequate infrastructure, which hindered broader acceptance.

2. In Indonesia, Susanto and Wijaya (2020) analyzed the economic implications of digital payment adoption on street vendors. Their study concluded that digital payments improved business efficiency and customer satisfaction, which directly contributed to increased income levels for vendors.

Statement of the Problem

The impact of digital payment systems on street vendors has been significant, especially in the modern era where technology is transforming business operations at all levels. Digital payment methods, such as mobile wallets, QR codes, and online transactions, have provided street vendors with opportunities for growth, efficiency, and wider customer reach. However, challenges like lack of digital literacy, low access to smartphones, and internet connectivity still persist in some regions, which can hinder full adoption. Hence, this study aims to analyze the impact of digital payment system on street vendors in Virudhunagar town.

Scope of the Study

The scope of this study is confined to analyze the problems faced by street vendors and to analyze the Impact of Digital Payment System on Street Vendors in Virudhunagar Town.

Objectives

This study is carried out with the following objectives

➢ To present the demographic profile of the respondents under the study area.
➢ To express the mode of digital payment used by the street vendors and the benefits derived from digital payments.
➢ To study the association between gender of the respondents and their opinion on the impact of digital payment system on sales.
➢ To analyze the problems faced by the respondents while using digital payment methods.
➢ To offer suggestions based on the findings of the study.

Methodology

This study is based on both primary and secondary data. Primary data have been collected from 120 street vendors in Virudhunagar town through convenience sampling. The collected data were edited, tabulated and analysed for the purpose of presentation. Percentage analysis, simple ranking technique and chi-square test have been applied to analyze the data. Secondary data have been gathered from various books and websites.

Problems Faced by Street Vendors

The following are the problems faced by the street vendors.

Lack of Awareness and Understanding

Many vendors are unfamiliar with how digital payment systems work or their potential benefits. This lack of knowledge can lead to unwillingness to adopt digital payment methods.

Security Concerns and Trust Issues

Fear of cyber fraud and unauthorized transactions discourages adoption. Concerns about the security of digital transactions and data privacy are significant barriers. The ease of digital payments also makes them a target for scams.

Technical Issues and Infrastructure Gaps

Network failures, delayed payment notifications, and device malfunctions can create distrust. Vendors in rural areas often lack smartphones, reliable internet access, or electricity. Technical disruptions, like internet outages or app malfunctions, can leave vendors unable to accept payments.

Digital Divide and Digital Literacy

Vendors, particularly those who are not tech-savvy, struggle to adopt this technology. Lack of digital literacy and skills can hinder the adoption and use of digital payment systems.

Analysis and Interpretation

Profile of the Respondents

Socio-economic variables such as gender, age, educational qualification, working hours, working experience and monthly sales were collected and tabulated in Table 1.

Table 1

Socio-Economic Profile of the Respondents

Socio-Economic Variables		Number of Respondents	Percentage
Gender	Male	78	65
	Female	42	35
Age (in years)	Below 20	4	3
	21-40	32	27

	41 – 60	64	53
	Above 60	20	17
Educational Qualification	Below SSLC	67	56
	HSC	45	37
	Degree	8	7
Working Hours per day	Below 8	6	5
	8-10	92	77
	More than 10	22	18
Working Experience (Years)	Less than 5	22	18
	5 to 10	42	35
	10 to 15	38	32
	Above 15	18	15
Monthly Sales (₹.)	Less than 50,000	14	12
	50,001 – 1,00,000	64	53
	1,00,001 – 1,50,000	32	27
	Above 1,50,000	10	8

Source: Primary data

Out of 120 respondents surveyed, 78(65%) are male; 64(53%) belong to the age group of 41-60 years; 67 (56%) studied below SSLC; 92(77%) are working for 8-10 hours in a day; 42(35%) have working experience of 5 to 10 years and 64(53%) earns the monthly sales between ₹ 50,001 to ₹1,00,000.

Table 2

Vending Category

Vending Category	No. of Respondents	Percentage
Vegetables and Fruits	54	45

Flowers	20	17
Groceries	6	5
Fast food and Snacks	28	23
Plastic goods	4	3
Dress items	8	7
Total	**120**	**100**

Source: Primary data

It is understood from the table 2 that 54 (45%) respondents sell vegetables and fruits.

Table 3

Period of using Digital Payment System

Years	No. of Respondents	Percentage
Less than 1	26	22
1-3	22	18
3-5	54	45
More than 5	18	15
Total	**120**	**100**

Source: Primary data

The table 3 indicates that 54 (45%) respondents use digital payment system for the past 3-5 years.

Table 4

Mode of Digital Payment

Mode	No. of Respondents	Percentage
Credit card and Debit card	12	10
Mobile wallet	22	18
QR code based pay	86	72
Total	**120**	**100**

Source: Primary data

According to 86(72%) respondents, QR code based pay is the mostly used mode of digital payment.

Table 5

Benefits of Digital Payment System

Benefits	No. of Respondents	Percentage
Convenient	34	28
Secured	36	30
Relief from maintaining petty cash	50	42
Total	**120**	**100**

Source: Primary data

It is observed from the table 5 that, 50 (42%) respondents told that they are relieved from maintenance of petty cash.

Table 6

Opinion on the Impact of Digital Payment System on Sales

Opinion / Gender	Very High	High	Average	Low	Very low	Total
Male	27	18	12	15	6	**78**
Female	16	14	3	7	2	**42**
Total	**43**	**32**	**15**	**22**	**8**	**120**

Source: Primary data

Association Between Gender and the Opinion on the Impact of Digital Payment System on Sales

In order to study the association between gender and the opinion on the impact of digital payment system on sales, chi-square test was applied with the following null hypothesis.

Ho: There is no significant association between gender and the opinion on the impact of digital payment system on sales.

Chi- Square Table

O	E	(O-E)	(O-E)^2	(O-E)^2/E
27	27.95	0.95	0.90	0.03

18	20.8	2.80	7.84	0.38
12	9.75	2.25	5.06	0.52
15	14.3	0.70	0.49	0.03
6	5.2	0.80	0.64	0.12
16	15.05	0.95	0.90	0.06
14	11.2	2.80	7.84	0.70
3	5.25	2.25	5.06	0.96
7	7.7	0.70	0.49	0.06
2	2.8	0.80	0.64	0.23
X^2				**3.09**

Source: computed data

$$X^2 = \sum (O-E)^2/E = 3.09$$

$$\text{Degrees of freedom} = (c-1)(r-1)$$

$$= (5-1)(2-1)$$

$$= 4*1 = 4$$

For 4 d.f. at 5% level of significance, the table value of chi-square is 9.488. The calculated value of chi-square is 3.09. The calculated value is lower than the table value. So, the null Hypothesis is accepted indicating that there is no significant association between gender and the opinion on the impact of digital payment system on sales.

Table 7

Problems faced by Street Vendors in the Digital Payment System

Problems	Out of 120 respondents					Total Score	Mean Score	Rank
	I	II	III	IV	V			
Security risk	46 (230)	28 (112)	12 (36)	22 (44)	12 (12)	120 (434)	3.62	II
Network issue	38 (190)	32 (128)	10 (30)	6 (12)	34 (34)	120 (394)	3.28	V
Transaction cost	34 (170)	34 (136)	24 (72)	24 (48)	4 (4)	120 (430)	3.58	III
Digital Divide	42 (210)	14 (56)	30 (90)	30 (60)	4 (4)	120 (420)	3.50	IV
Lack of digital literacy	40 (200)	28 (112)	36 (108)	4 (8)	12 (12)	120 (440)	3.67	I

Source: Primary data

From the above table it is observed that,

- ➢ The problem 'Lack of digital literacy' got the first rank with the mean score of 3.67.
- ➢ The problem 'Security risk' got the second rank with the mean score of 3.62.
- ➢ The problem 'Transaction cost' got the third rank with the mean score of 3.58.
- ➢ The problem 'Digital Divide' got the fourth rank with the mean score of 3.50.
- ➢ The problem 'Network issue' got the fifth rank with the mean score of 3.28.

Suggestions

In the light of inferences of the study, the following suggestions are given.

1. Digital literacy programmes should be organised to the street vendors by the Government and NGO's to solve the issues and challenges faced by the street vendors while using digital payment system.

2. Street vendors may be educated about basic cybersecurity practices, such as avoiding phishing scams and using secure passwords. Then only the street vendors can use digital mode of payment without any fear of loss of money and we move one more step towards financial inclusion via digital payment system.

Conclusion

The adoption of digital payments by street vendors is not merely a technological shift but a transformative step toward financial inclusion, operational efficiency, and economic empowerment. Governments should offer subsidies for smartphones and data plans. The integration of digital payments with other financial services, such as savings accounts, microloans, and insurance schemes, can provide additional value to vendors, fostering financial stability and long-term growth.

References

1) *Gupta. S. P. Statistical Methods, Sultan Chand &sons, New Delhi, Forty Sixth Revised Edition, 2021.*

2) *C.R. Kothari., Research Methodology, New Delhi: New Age International Private Limited Publishers, 2011.*

3) *https://www.socialsciencejournal.in/assets/archives/2023/vol9issue3/9074-1684495201016.pdf*