



## Trends and Adoption of E-payment Methods in Online Shopping

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### Abstract

The study based on the trends and adoption of e-payment methods in online shopping in Puducherry. This study focused on primary and secondary data collection methods. The primary data collected through a Google form from 30 respondents in Puducherry. The researcher used percentage analysis for this study. The study concluded that Google Pay emerged as the most widely used digital payment platform, suggesting its ease of use, reliability, and wide acceptance among users. There is a clear shift toward digital transactions, with online apps being the preferred payment method for most participants. The study revealed that a high level of satisfaction with e-payment systems, both in terms of user experience and perceived benefits like saving time and money. Moreover, there is strong trust in the security of these platforms, which is crucial for sustained usage and wider adoption.

**Keywords:** E-commerce, e-payments, online shopping.

### Introduction

E-commerce (electronic commerce) refers to the commercial transactions conducted electronically on the internet. It encompasses a wide range of business activities, including online shopping, online auctions, electronic ticketing, online banking, and much more. Essentially, any business activity that involves the exchange of information, goods, or services via computer networks falls under the umbrella of e-commerce.

E-payment (electronic payment) refers to a system of payment where money is transferred electronically from one account to another. Unlike traditional payment methods involving physical cash or checks, e-payments leverage digital technologies to facilitate transactions. This can include credit/debit card payments, net banking, mobile wallets, and other digital payment gateways. E-payments are integral to e-commerce, enabling secure and efficient financial settlements for online transactions.

### Review of Literature

Martina & Selvi, (2017) stated an overview on Digital Payments the objective of the study to explore the various modes of digital payment transaction that is offered by various financial institutions, the extent of operations of digital payments while dealing with online transactions and offer suitable suggestions in handing digital payments as easy and convenient one. The study is based on secondary data the materials were used books, journal, newspaper and websites. The finding of the study Government ensure that the

operation of digital payment transaction free from transaction cost which help to customer to purchase, it could give concession to the retailers, merchants who sell the product and services via digital mode, training programmes could be organized by the government to train people to use of digital payments, Government can give continuous media coverage through TV news, radio or social networking about the benefits of digital payments to the society.

Vally & Divya (2018) <sup>[2]</sup> stated that a study on Digital Payments in India with perspective of consumers adoption from the objectives of the study was to examine the age of respondents impact on digital payments, analyze the impact of customers education and customer income usage of digital payments. The data used for the study was primary drawn from the convenience sampling. They have collected data through structured questionnaire and they analyzed by using the simple percentage analysis and chi square test have been taken for the study. The finding of study is effect of adopting digital payments impact on banking sector by consumer in India. The results gives important policy that our country to increase cashless payments. The study gives percentage of awareness on maximum utilization of technology bank should take effective measures in creating awareness towards the effective usage of technology and security.

Jacob Kurian, (2022) <sup>[3]</sup> stated that a "study on India Digital payments and their impact on consumers". The objective of the study to investigate the impact of respondents age on digital payments, examine the effect of customer education on digital payment usage, investigate the impact of a customer's

income status on their use of digital. The study is being carried out data collection structured questionnaire used, simple percentage, chi square was used. Secondary Primary data were used in this methodology. The finding of the data was acquired from Bangalore based sample. The survey goal was to check customer's opinions about digital payment in relation to the concept of general banking. It shows that deploying technology for digital payments has enhanced the banking sectors performance and made it possible to accomplish goal of a cashless society.

Leebana Gracy (2024) stated the "A Study on Digital Payments and users experience". The Objectives of the study are the relationship between age usage of digital payments, analyze the factors that influences digital payments, explore the problems faced by users, understand the awareness of using digital payment application assess the user satisfaction level. The purpose of the study was primary data which was collected from respondents belonging to different age group, gender, occupation etc., and used secondary data like research articles, journals, and magazine. The sample size was 50 around people Bangalore for the purpose of this study. The analysis tools were used Regression statistical tool was used for analyzing the primary data collected, with the use of SPSS software. The Findings of the study is the factor influence the use of digital payments is convenience which 23/60 respondents have opted, access to technology 19/60 response. The major problem faced digital payment is technical issue for which 42 out of 60 has responded. Highly used application for digital payment is Google pay 50% of respondents have opted i.e., 30/60 and secondly stands Phonepe 21/60 respondent. The 41 out 60 respondents are highly satisfied using digital payment method.

## Objectives

### General Objectives:

The general objectives of the study are to understand about the knowledge of E-payment among limited group of people.

### Specific Objectives

- To study how to use E-payments protocols among the respondents
- To study the security of E-payment
- To-know the people interest about E-payment
- Examine Payment Gateway Functions
- Understand Digital Payment Mechanisms
- Enable Financial Inclusion

## Methodology

This study is carried by primary data of about 30 peoples in nearby residence area is Lawspet, Pondicherry. The questionnaire framed in closed ended form consisting questions about the understanding and usage of E-payment. The data hence used is closed ended.

## Period of the Study

This study period is 2<sup>nd</sup> to 28<sup>th</sup> May and 30 responses from this month.

## Sample Size

The responses are collected from 30 peoples from Puducherry.

## Analytical Tool

Analytical tools are methods are techniques used to analyse and interpret data, information, or situations here are some

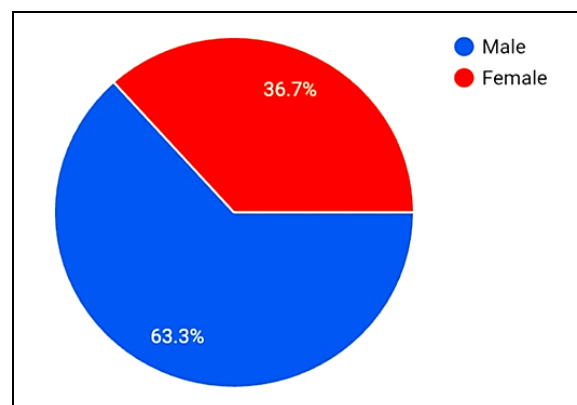
key points about analytical tool. Ms Word, Ms Excel, Google Form.

## Result and Analysis

**Table 1:** This table shows gender of the respondents

Sl. No.	Gender	No. of Respondents	Percentages
1	Male	19	63.3%
2	Female	11	36.7%
Total		30	100%

The table indicates that a majority of respondents are males (63.3%), while females make up only 36.7% of the sample.

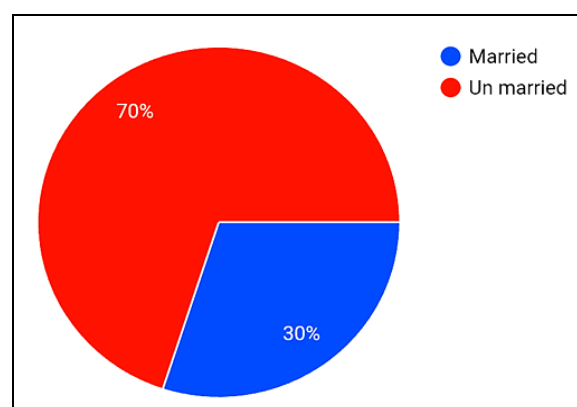


**Fig 1:** This figure shows gender of the respondents.

**Table 2:** This table shows marital status of the respondents.

Sl. No.	Marital Status	No. of Respondents	Percentage
1	Married	09	30%
2	Unmarried	21	70%
Total		30	100%

The table indicates that 30% of the population is married, while 70% are unmarried. This suggests that the sample is largely composed of single individuals.

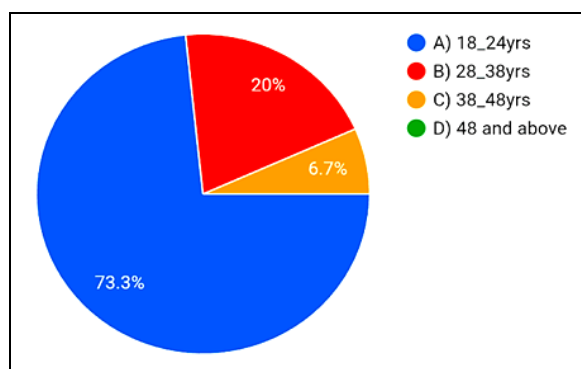


**Fig 2:** This figure shows marital status of the respondents

**Table 3:** This table shows the age of the respondents.

Sl. No.	Age	No. of Respondents	Percentage
1	18-28 years	22	73.3%
2	28-38 years	06	20%
3	38-48 years	02	6.7%
4	48 and above	Nil	0%
Total		30	100%

The table shows that the majority (73.3%) of individuals are aged between 18–28 years, indicating a predominantly young population. The 28–38 age group makes up 20%, while only 6.7% are between 38–48 years.

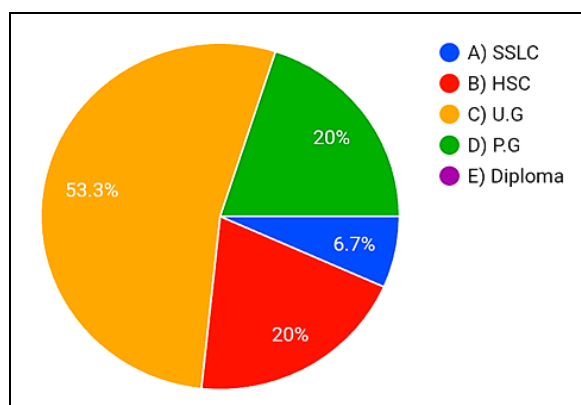


**Fig 3:** This figure shows the age of the respondents.

**Table 4:** This table shows the educational qualification of the respondents.

Sl. No.	Education	No. of Respondents	Percentage
1	SSLC	2	6.7%
2	HSC	6	20%
3	U.G.	16	53.3%
4	P.G.	6	20%
5	Diploma	nil	0%
Total		30	100%

The table shows that most individuals (53.3%) have an undergraduate (U.G.) qualification, indicating a well-educated group. HSC and P.G. holders are equally represented at 20% each, while only 6.7% have completed SSLC. This suggests a strong emphasis on higher education among the population surveyed.



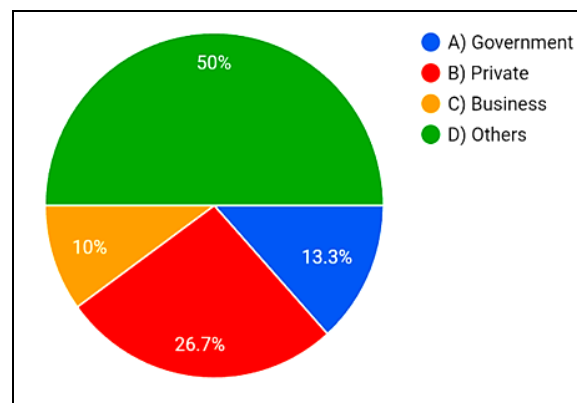
**Fig 4:** This figure shows the educational qualifications of the respondents.

**Table 5:** This table shows profession of the respondents.

Sl. No.	Profession	No. of Respondents	Percentage
1	Government	4	13.3%
2	Private	8	26.7%
3	Business	3	10%
4	Others	15	50%
Total		30	100%

The table shows that 50% of individuals belong to other professions, indicating a diverse range of unspecified

occupations. Private sector employees make up 26.7%, followed by government workers at 13.3%, and business professionals at 10%.

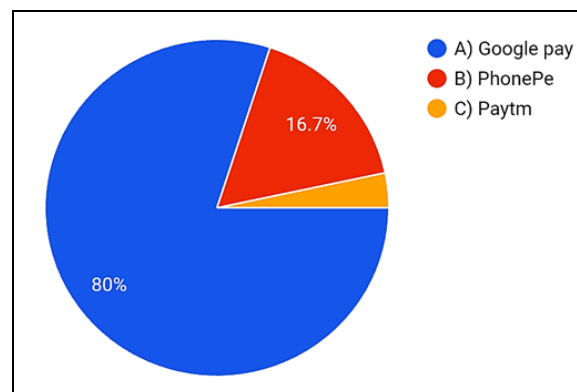


**Fig 5:** This figure shows profession of the respondents.

**Table 6:** This table shows online payment apps used by the respondents.

Sl. No.	Apps	No. of Respondents	Percentage
1	Google Pay	24	80%
2	PhonePe	5	16.7%
3	Paytm	1	3.3%
Total		30	100%

The table shows that 80% of individuals use Google Pay, making it the most preferred digital payment platform. PhonePe is used by 16.7%, while only 3.3% use Paytm. This indicates Google Pay's dominance in user preference, possibly due to its ease of use or widespread acceptance.



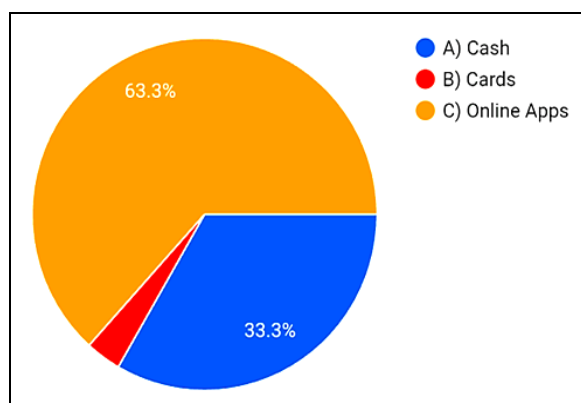
**Fig 6:** This figure shows online payment apps used by the respondents.

**Table 7:** This table shows mode of payment used by the respondents.

Sl. No.	Mode of Payment	No. of Respondents	Percentage
1	Cash	10	33.3%
2	Cards	1	3.3%
3	Online Apps	19	63.3%
Total		30	100%

The table shows that 63.3% of individuals prefer using online apps for payments, indicating a strong shift toward digital transactions. Cash is still used by 33.3%, showing some reliance on traditional methods. Only 3.3% use cards,

suggesting they are the least preferred option. This reflects growing trust and convenience in mobile payment apps.

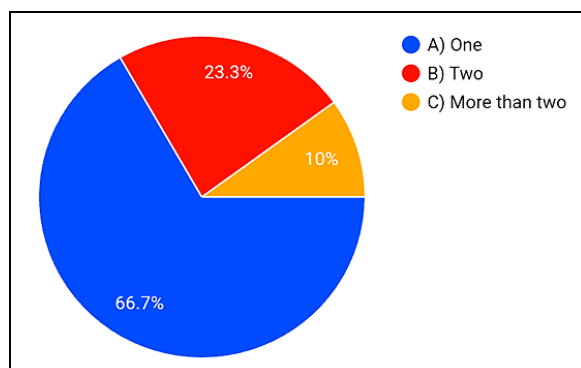


**Fig 7:** This figure shows mode of payment used by the respondents.

**Table 8:** This table shows Number of bank accounts used by the respondents.

Sl. No.	Accounts	No. of Respondents	Percentage
1	One	20	66.7%
2	Two	7	23.3%
3	More than two	3	10%
Total		30	100%

The table shows that 66.7% of individuals have only one bank account, indicating a preference for simple financial management. Two account holders make up 23.3%, while only 10% have more than two accounts. This suggests that most people manage their finances through a single primary account, with fewer opting for multiple accounts.

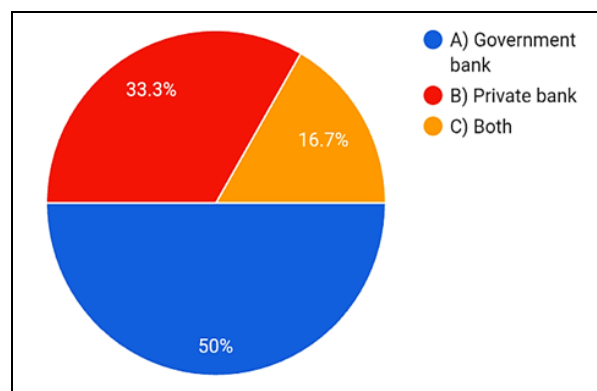


**Fig 8:** This figure shows Number of bank accounts used by the respondents.

**Table 9:** This table shows banks used by the respondents.

Sl. No.	Bank	No. of Respondents	Percentage
1	Government Bank	15	50%
2	Private Bank	10	33.3%
3	Both	5	16.7%
Total		30	100%

The table shows that 50% of individuals use government banks, indicating higher trust or accessibility in public sector banking. Private bank users make up 33.3%, while 16.7% use both types. This suggests a preference for government banks, though a significant portion also values the services of private or multiple banks.

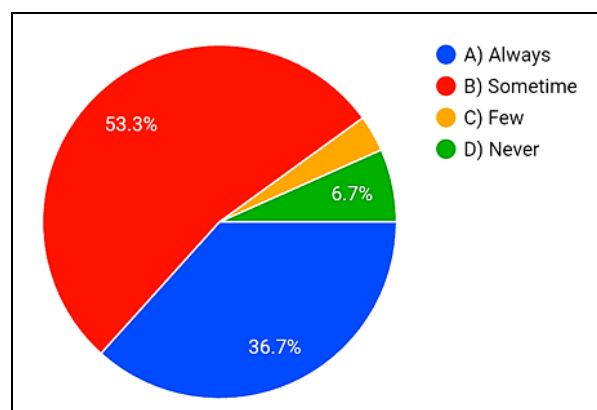


**Fig 9:** This figure shows banks used by the respondents

**Table 10:** This table shows online app user among the respondents.

Sl. No.	Usage	No. of Respondents	Percentage
1	Always	11	36.7%
2	Sometimes	16	53.3%
3	Few	1	3.3%
4	Never	2	6.7%
Total		30	100%

The table shows that 36.7% of people always use e-payments, while 53.3% use them sometimes, indicating a high overall adoption. Only 3.3% use them rarely, and 6.7% never use them. The low percentage of non-users suggests that e-payments are widely accepted, with most people relying on online transactions regularly.

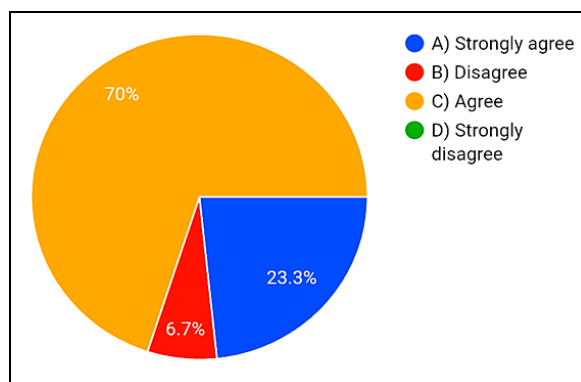


**Fig 10:** This figure shows online app users among the respondents.

**Table 11:** This table shows time & money saving by the respondents.

Sl. No.	Willingness	No. of Respondents	Percentage
1	Strongly agree	7	23.3%
2	Disagree	4	13.3%
3	Agree	17	56.7%
4	Strongly disagree	2	6.7%
Total		30	100%

The table shows that a majority of users (56.7%) agreed and 23.3% strongly agreed that using online apps saves time and money, indicating positive acceptance. Only 13.3% disagreed and 6.7% strongly disagreed, showing minimal resistance. This suggests that most users recognize the efficiency and benefits of e-payments.

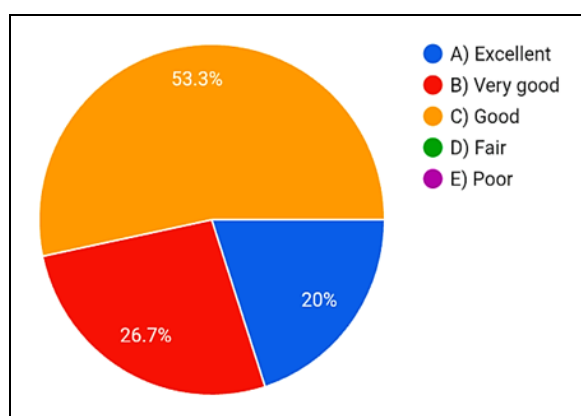


**Fig 11:** This figure shows time & money saving by the respondents.

**Table 12:** This table shows online payment experience by the respondents.

Sl. No.	Experience	No. of Respondents	Percentage
1	Excellent	6	20%
2	Very good	8	26.7%
3	Good	16	53.3%
4	Fair	0	0%
5	Poor	0	0%
Total		30	100%

The table shows that all users had a positive experience with online payments, with 53.3% rating it as good, 26.7% as very good, and 20% as excellent. Notably, no users reported fair or poor experiences. This indicates high user satisfaction and a smooth experience with online payment systems.

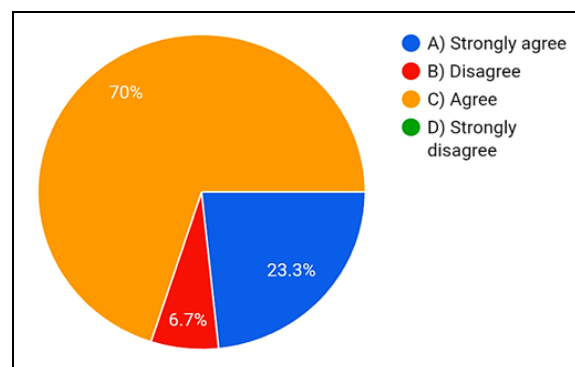


**Fig 12:** This figure shows online payment experience by the respondents

**Table 13:** This table shows payment security by the respondents.

Sl. No.	Secure	No. of Respondents	Percentage
1	Strongly agree	7	23.3%
2	Disagree	2	6.7%
3	Agree	21	70%
4	Strongly disagree	0	0%
Total		30	100%

The table shows that 70% of users agreed and 23.3% strongly agreed that online payment apps are secure, indicating high confidence in their safety. Only 6.7% disagreed, and no users strongly disagreed. This suggests that most users trust the security measures of digital payment platforms, contributing to their widespread adoption.



**Fig 13:** This figure shows payment security by the respondents.

## Conclusion

In conclusion, the study highlights a predominantly young, male, and well-educated population with a strong inclination toward digital technologies, particularly in the area of online payments. Google Pay emerged as the most widely used digital payment platform, suggesting its ease of use, reliability, and wide acceptance among users. There is a clear shift toward digital transactions, with online apps being the preferred payment method for most participants. However, the continued use of cash indicates that traditional payment methods still hold relevance for a segment of the population. Most participants manage their finances with a single bank account and show a stronger preference for government banks, likely due to factors such as trust, accessibility, or familiarity. The high levels of satisfaction with e-payment experiences, combined with strong trust in the security of these platforms, further support the growing reliance on digital payment systems. The study also reveals a high level of satisfaction with e-payment systems, both in terms of user experience and perceived benefits like saving time and money. Moreover, there is strong trust in the security of these platforms, which is crucial for sustained usage and wider adoption.

## Limitations

- Rapid Technological Changes
- Lack of Practical Exposure
- Limited Access to Industry Data
- Geographic and Regulatory Constraints
- Time constraints-due to limited time the study is restricted to limited number of people and calculations

## References

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