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# A Study on E-Payment Applications used by Online Customers

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**Abstract:** *Mobile payment apps, being digital in nature, facilitate convenient transactions and money transfers. Customers derived advantages from the implementation of various payment systems. Several e-payment applications, including Google Pay, PhonePe, Paytm, and others, are utilized for UPI transactions. In recent years, there have been a lot more payment choices on the local market. This has led to a huge rise in the number of people using Internet-based payment apps. These payment apps create significant value and satisfaction. This study examines both the utilization and satisfaction of online customers utilizing payment applications. This study employs a descriptive research approach, utilizing a sample size of 100 customers to collect data from primary sources. In order to achieve this objective, sophisticated techniques like simple percentage analysis are utilised. The process of analysing and interpreting data is visually represented through the use of graphs and pie charts.*

**Keywords:** *E-payment applications, UPI transactions, customers*

## I. INTRODUCTION

The "Digital India" campaign was launched by the Indian government in an effort to transform the nation entirely into a digital format. The primary goal of Digital India is to implement an infrastructure that is devoid of physical documentation, cash transactions are unnecessary, and face-to-face interactions are unnecessary. In recent years, digital payment systems have grown in significance, particularly since the implementation of demonetization. The government is actively striving to increase the adoption of payment gateway services by the general public. A number of digital products are now discounted by the organization as an incentive to utilize its payment channels. Furthermore, it has integrated the United Payments Interface (UPI), a platform that operates on mobile applications and facilitates communication with a wide range of financial institutions. Banking transactions can be facilitated on mobile phones even in the absence of an internet connection through the utilization of the Unstructured Supplementary Service Data (USSD) protocol.

The facilitation of the adoption and transition towards digital payments is enhanced by supplementary governmental initiatives, including UPI and BHIM. Patrons are granted the choice to employ electronic payment mechanisms at the point of sale (POS), including credit cards, mobile banking via smartphone, or online banking.

The utilization of the internet has experienced a significant and rapid increase in today's technologically advanced society. Customers are efficiently reducing their banking time by utilizing digital devices. This digital payment solution is unparalleled in terms of convenience, ease, and security for online money transactions.

The pace of technological advancement in the modern day is rapidly accelerating, as we have all witnessed. In this instance, online payment applications were also implemented, and clients have expressed satisfaction with them. Most urban residents have become accustomed to this computerized form of payment. Currently, a small proportion of individuals residing in rural regions lack comprehension regarding the significance and utility of these digital payment applications.

## II. METHODS OF E-PAYMENT

Listed below are some payment methods utilized by online customers.

### 1) Credit Card And Debit Card Method Of Payment

Card payments are among the most widely utilized and well-liked methods of payment throughout the globe. Users are required to input only the card number, CVV, and expiration date when using card payment methods; this is done as a precautionary measure. Fraud can be readily identified with the CVV by comparing customer information to the provided CVV number. Debit cards are the most popular among consumers with a financial limit who purchase online.

## 2) *Bank Transfer*

Internet banking users have the ability to conduct bank transfers, which are considered the most dependable technique due to the fact that the transactions require user authorization, approval, and authentication. It is widely regarded as a crucial payment method in the realm of electronic commerce or online purchasing. It can provide a straightforward method for paying for online purchases without using a credit card.

## 3) *E-Wallet Payment Method*

E-wallets, alternatively referred to as virtual wallets, necessitate registration from both the purchaser and vendor. They link their bank account to an electronic wallet account that they create. Funds can be withdrawn or deposited using a computer or mobile device with minimal effort.

## 4) *Electronic Fund Transfer (EFT)*

E-payment is a way to move money from one bank account to another using computer systems, without anyone from the bank having to touch the money directly. They could be from the same bank or different ones.

## 5) *WI-FI Banking*

This is another well-liked e-commerce payment method; it is also referred to as internet banking or online banking. It is a straightforward process of making online purchases using funds from the user's bank account.

### III. OBJECTIVES OF STUDY

- 1) Analyse the cause of utilizing online payment apps from the perspective of customer.
- 2) Examine the most frequently used online payment applications.
- 3) To find out what age group uses online payment apps the most.

### IV. LITERATURE REVIEW

Kaur, Puneet, et al. (2020) examine the exponential growth of mobile wallet applications in their study. Notwithstanding their utility for consumers and their facilitation of secure transactions and payments, mobile wallets have yet to penetrate mainstream markets. Ghosh and Gourab (2021) state that modern payment systems were made possible by advancements in information and communication technology. The widespread availability of smartphones and internet connectivity brought about a new era of digitization by improving people's daily lives. Digitization has facilitated and expedited payment processes, which in turn have improved trade and business.

The authors are G. Sandhya, G. Rejikumar, and Sruthy S. Pillai. This year (2019) The trend, according to their interpretation, shows that people favoured using non-cash alternatives for smaller transactions when cash shortages were acute. According to the results, mobile payment system acceptance is greatly enhanced by features that promote ease of use and compatibility with existing systems. The dependent variable was shown to be negatively affected by timely contacts and security, on the other hand. Consumers worry more about security breaches when they shop online because they believe their financial data is not safe.

Maindola, Pallavi, Neetu Singhal, and Akash D. Dubey (2018) saw a significant growth in the adoption of digital payment systems throughout the country. Since the implementation of demonetization, there has been a complete reversal in the payment environment. Due to the introduction of new technology and the government's efforts to promote a cashless economy, numerous non-banking enterprises have entered the payment industry, mostly influenced by the demonetization crisis.

Arvidsson (2013) examines the instability of the payment system, a phenomenon that has the potential to become a detrimental self-reinforcing cycle. However, by applying scenario analysis and the theory of causal texture to the payment system's confusion and significant inertia, the institutional structure of the industry could be altered. The research suggested that in sectors that are particularly demanding, such as banking, telecommunications, and systems-driven industries, renewal followed by innovation could increase acceptability of potential collaborations and/or barriers to their integration.

### V. RESEARCH METHODOLOGY

The study took place in Dumka, Jharkhand, and samples were gathered from customers. The point of this study is to find out what people think about the good and bad points of online banking apps. A detailed research method was used for this study.

A group of 100 people was chosen as the sample number for the study. We get comments from customers. Within the approved study area, researchers were free to choose study participants at any time. The 100 people who took the poll were picked at random. The researcher looked at how people felt about online payment apps to see if the percentages were significant.

### VI. DATA ANALYSIS AND FINDINGS

Table 1.1:- Usage of online payment apps by customer

Cause for using online payment apps	Percentage of respondents
Online shopping/purchase	86
Fund transfer	50
Mobile recharge	87
Payment of bills(gas , etc)	39
TV recharge	32
Online ticket booking( rail/air)	43
Others	7

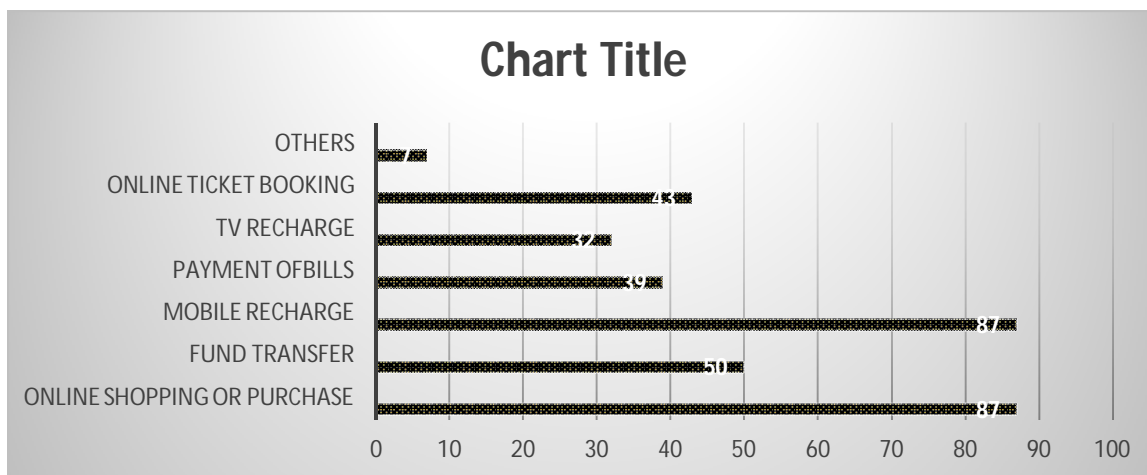


Fig:- Usage of online payment apps by customers.

Analysis: The above table shows that 87% of customers use online payment apps for mobile recharge, 86% use it for online shopping, 50% of customers use payment applications for fund transfer, 43% online customers use payment apps for ticket booking purpose, whereas 39% and 32% of customers use it for payment of online bills such as electricity, gas and Tv recharge respectively.

Inference: - Majority of customers (87%) prefer online payment apps for mobile recharge.

Table 1.2: - Payment apps commonly used by customers

Online Payment apps	Percentage of users (customers)
Google pay	31.1
PhonePe	29.1
Debit card	17.5
Paytm	10.7
UPI transaction	4.9
Internet banking	4.9
BHIM app	1.0
Credit Card	1.0
Total	100

### PERCENTANGE OF USERS(CUSTOMERS)



Fig: - Payment apps commonly used by customers

Analysis: - Based on the above data, we can conclude that 31.1% of customers use Google pay, 29.1 % use Phone Pe, 17.5% use Debit card, 10.7% of customers uses Paytm, 4.9 % and 4.9 % of online users are of UPI transactions and internet banking respectively, 1 % users are of BHIM app and only 1% of users are using credit card.

Inference: - when customers were surveyed about the payment apps that was frequently used by them, it was found that majority (31.1%) of customers uses google pay for their daily transactions.

Table 1.3:- Different age group using online payment apps

Age group	Percentage of users (customers)
15-24	35.9
25-34	41.7
35-44	16.5
45-54	3.9
55 and above	1.9
Total	100

### Sales



Analysis :- The above table shows that 35.9% users belong to age group 15-24, 41.7% users are aged from 25-34, 16.5% online payment users belong to age group 35-44, 45-54 years of age group constitute 3.9%, 55 and above age group makes 1.9% of online payment apps users.

Inference :- 25-34 years of age group people constitute the majority of users.



## VII. CONCLUSION

From cash to online payment apps like Paytm, Bhim, and PhonePe, there has been a clear growth in the means of payment. Mobile banking and online shopping have largely supplanted the use of physical currency. Both in-person and everyday internet transactions are being increasingly paid for through online techniques, which are the focus of this study. This article takes a look at the problems and worries surrounding online payment systems and how consumers are embracing e-commerce. Consumers are becoming more comfortable with mobile payments due to technical developments that make them easier, more transparent, and more convenient. It is clear that banking, retail, and the majority of mobile devices are seeing a transition in customer behaviour away from more conventional and toward more advanced online payment options. Online payment systems will likely remain popular due to the growing number of clients using these methods and performing transactions online, as seen in this study's statistics. However, there are current and future opportunities and challenges for developing and implementing safe online payment systems due to the incorporation and use of many new technologies.

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