

A COMPARATIVE STUDY ON DIGITAL PAYMENT APPLICATIONS WITH REFERENCE TO PHONE PE & GOOGLE PAY

Prof (Dr) Ashok Kumar Tiwari,
Professor, PSIT College of Management, Kanpur (U.P)

ABSTRACT

The demonetization drive of the government to curb the bribery resulted in tremendous growth in digital payments. The 'Digital India' campaign of the government of India given a vast opportunity for the country to come up with various digital platforms for the purchases, sales, payments, receipts and so on. This transformation towards digital payments benefits in more transparency in transactions which empowers the country's economy which is paperless, faceless and cashless. The tremendous growth happened with the digital India has shown remarkable growth in the usage of mobile phones and internet which contributed for the growth of digital payment. Trust, Ease of use, usefulness, security, attitude & intention to use are positive factors given a boost to digital payment system.

In recent days many changes took place in the payment system like digital wallets, UPI and BHIM apps for smooth shift to digital payments. Among UPI payment system various payment wallets like Paytm, Google pay, Phone pe, whatsapppe, amazon pe, razorpe have become necessity of the day-to-day transactions. The objective of this research paper is to understand the growth & progress of Phone pe and Google pe over the years. Secondly the customer preference towards phone pe & Google pay wallets are analysed with the help of primary data collected from the mobile wallet users. Also offer a suggestion to improve digital payment system. Analysis have been done using ABCD analysis. The stepping stone forward in the payment system is UPI payment system due to large number of customers falling towards online payments over traditional method of payment.

Keywords: Digital payments, Mobile wallets, Google Pay, phone pe, online transactions, ABCD analysis

1. INTRODUCTION: The growth of financial services in India is hugely influenced by the functioning of banks. The various regulatory units as well as the banks have led to the initial thrust development & support of digital payments infrastructure system. India with its rich payment eco system has emerged as a global leader in innovative population scale payment system. Combination of trust and innovation has resulted in a growth in the number of digital payments applications. It has made huge Progresso the supply side by providing a wide range of payment services through bank accounts, mobile phones, cards and related devices which are backed by advanced payment infrastructure like RTGS, NEFT, IMPS, BHIM, UPI, POS, ATM's, NACH, Mobile wallets etc.

However cash is still the dominant mode for the outflow of cash for our Indian consumer because of lack of acceptance ecosystem for digital payments' five yearly RBI vision documents which sets the tone & vision for achieving key objectives in the payment ecosystem aptly sums up the priority for RBI to transform the payment landscape in India.[1].

when all the payment transactions are done through online channels, it is referred as digital payments. It can be defined as a platform that is used for making monetary transactions for various goods and services purchase with the help of internet [2]. In digital payments both payer and receiver sending & receiving money with help of some source. The overall ecosystem includes banks & payment service providers which work both in synchronized manner. These will increase the source fund for banks as well as easy operating facility to customers.

Among digital payments the most popular two payment systems are googled pay and phone pe. two of the google payment services android pay and google wallet have merged and came up with new technique google pay which is introduced in 2018. It is giving wide integrated experience in dealing with payment option both instore and online as well as peer to peer transactions.

Phone pe is introduced in 2016 as a Indian digital payment and financial service company. It works under UPI platform. These two digital wallets permit the users to do online payments using these platforms.

2.REVIEW OF LITERATURE:

The review work shows that the digitalization of payments has benefited the customers, employees as well as the financial sector of the economy. The digitalization has become extremely important to compete with the cashless global economy.

Few literatures review on related work are given below:

Mahesh A &GnashBhatt(2021) [3], explained in the paper that UPI has shown remarkable growth in last couple of years due to customer's shift towards contactless payments over other methods. Study revealed that the growth of digital payments has increased significantly, especially in the retail payment sector on the UPI platform.

Rasa T.P.&S.Susila(2021)[4], This study mainly intend to understand the preference of online payment known as UPI in Urban and rural area. the focus of the study is on analysing the preference of UPI payment apps among male and female users in rural & urban areas with reference to Kannur district in Kerala. Through the study we can conclude that there is a developing trend about the preference of UPI but at a decreasing rate, there exist a wide difference in usage pattern among male and female respondents in both rural and urban area.

G. Sankararaman&S. Suresh (2021) [5], a study on various parameters of UPI transactions was conducted such as awareness level, satisfaction level, problems encountered by the users of UPI, and duration to solve the problems. For this purpose, descriptive research design has adopted, and 119 samples have collected through structured questionnaire. They have suggested that they should have regulatory framework for cyber security of UPI and also measures should be undertaken for adoption of UPI across nation

Sahib, AlanaMade; Khalid et.al.(2021)[6]. According to research, the most significant factor influencing consumers' behavioural intention to use digital payments is their expectation of how well their digital payment transactions will perform. In addition, ease of use was found to be a notable factor in digital payment adoption. Furthermore, given the driver and inhibitor of digital payment adoption, perceived risk and trust are considered the hinder to digital payments adoption.

Suresh Appukuttan& Anjali R(2019)[7]:The study was conducted to find the factors which have influence on the customer satisfaction of BHIM application. The analysis of the study shows that the factors which influenced the customers are speed of transaction, perceived ease of use, security and customer service.

RahallGochhuwal (2017) [8], The purpose of the paper 'unified payment interface- An advancement in payment systems", is to study in detail the technology behind UPI and the value addition that UPI brings with respect to the existing digital payment systems. It was found that UPI will bring large sections of population within the ambit of digital economy and can be used for financial inclusion concept in India. The paper concentrate on technical architecture and transactional process & security matters of UPI which will give strong foundation for digital economy.

Varda Sardana & Shubham Singhania (2018) [9]: they says that the commencement of the age of digital business has been rattle the business environment and breaking out the innovative and exceptional way of doing business. The infrastructure of the digital age has created opportunities for the business to grow both locally & globally.

Dr. M Sumathy and Vipin KP(2017)[10].focused on urban consumers' attitudes, and perceptions toward digital payment systems. The objective of this study is therefore to investigate the determinants of safety perception and the attitude, and awareness level towards digital payments. They found that there is no relationship between the education of the respondents and their level of awareness of digital payment systems.

Aparna J Sharma et.al.(2021)[12].The study is about understanding consumers 'perceptions concerning online and digital payments and the safety of these transactions in this world of connected technologies. Marketers need to know the perception of consumers towards cashless methods of transactions and this study helps in this. The study is qualitative and uses literature reviews to analyse the concept of digital transactions.

SuadBećirović, S. (2014)[11].technological innovation caused the use of paper money has been declining, whereas digital forms of payment have become more and more common, due to the rapid growth of electronic commerce (e-commerce). They have drawn conclusion from the studies that E-money to be secure, provide anonymity, portability and enable usage at low costs.so that it will be accepted in the market.

Sunny Gupta &Dr. Dinesh Kumar (2020)[13]This paper reviews the UPI- Unified Payment Interface technique of Digital Payment explains its design, Technologies, operations, Parties concerned in UPI dealing, its advantages & Challenges; additionally mentioned varied current UPI Apps that offered an alternative digital payment technique and their comparison with the UPI transactions. The study concludes that UPI may be a tool with compatible options which will create financial transactions straightforward and reasonable to the customers however it still wants confidence & awareness of the purchasers primarily type the rural background.

Dr.KratikaNeema & Dr. Arpit Neema (2018).[14].This paper reviews the UPI- Unified Payment Interface method of Digital Payment explains its architecture, Technologies, operations, Parties Involved in UPI Transactions, Benefits & Challenges; also discussed various current UPI Apps available and other digital payment method and their comparison with the UPI transactions. The study concludes that UPI is a tool with compatible features that can make monetary transactions easy and affordable to the customers but it still needs the confidence & awareness of customers from the rural background

Rakesh N, et al. (2018)[15]. Electronic transactions have increased due to the realization by the Indian population of the voluminous merits offered by popular modes of payments such as credit debit cards, net banking & e-wallets by the Indian population.

3.OBJECTIVES OF THESTUDY:

- 1.To understand the growth and progress of Phone pe and Google Pay.
- 2.To analyze customer preference towards Phone pe and Google pay wallets.
- 3.To offer suggestions for providing better services to Phone pe and Google pay customers.
- 4.To analyze UPI payments through ABCD analysis.

4.GROWTH AND PROGRESS OF PHONE PE & GOOGLE PAY:

The National Payment Corporations of India launched Unified Payment interface(UPI) in 2016. It allowed various payment service providers like Phone Pe & Google pay to connect to banks and transfer money. These providers are user friendly and very easy to operate which saves time and cost of the banks as well as customers. Both Google pay and phone pay has emerged as one of the most popular payment system which is now part of the necessary transactions in every one day to day living. The growth and progress have happened in both kinds of payment over the years. Few highlights are given below;

Phone Pay is an Indian Digital Payment Company headed in Bangalore, Karnataka. It's been introduced as one of the UPI in 2016 by payment partnering with Yes bank to launch UPI based mobile payments. The uses of Phone per are many like send and receive money, recharge mobile,DTH,data cards, pay at shops, buy insurance, mutual funds, godless. From the day of inception it has gone to the peak High of having crossed 10 core transactions in April 2022 and currently having over 20 core monthly active users. It has overtaken BHIM to become the market leader in UPI transactions in 2017. In 2022 Phone per became the first UPI trap app to allow UPI activation through Andhra. Currently it holds 50% market share by value of transactions in the UPI market. In 2017 Phone per launched a low cost POS device which enables payments through all the mobile devices.I2018 it entered into partnership with jiminy and aortal money. In 2019it was the first payment app to allow the customers to make bids for IPO(initial public offerings) through UPI platform.

In 2020 the application launched international travel insurance, domestic multi trip insurance, venture into motor insurance, platform for buying digital gold with 35% market share. In 2021 Phone pe was considered as the first payment platform to cross 100 core monthly transactions.

In 2022 the transactions crossed 10 core a day and also tokenized 1.4 crore debit & credit card. In 2023 it became the first payment platform to enable cross border UPI transactions.

It also got approval from RBI to serve as payment aggregator. Total growth has been increased to 77% at current as compared to FY 2022 and its revenue stood at 1646 cores.

Google Pay: With simple tag line “money made simple” Google Pay or Gpay was found in 2015 by Sujit Narayanan and Sumit Gwalani.

The application first introduced as Google Wallet in 2011 and later it launched Tejas in September 2017 along with UPI system. Within two years of its inception the active users have been raised to 67 millions. It is the second most active UPI payment system after PhonePe. It is an application developed by Google to provide payment services.

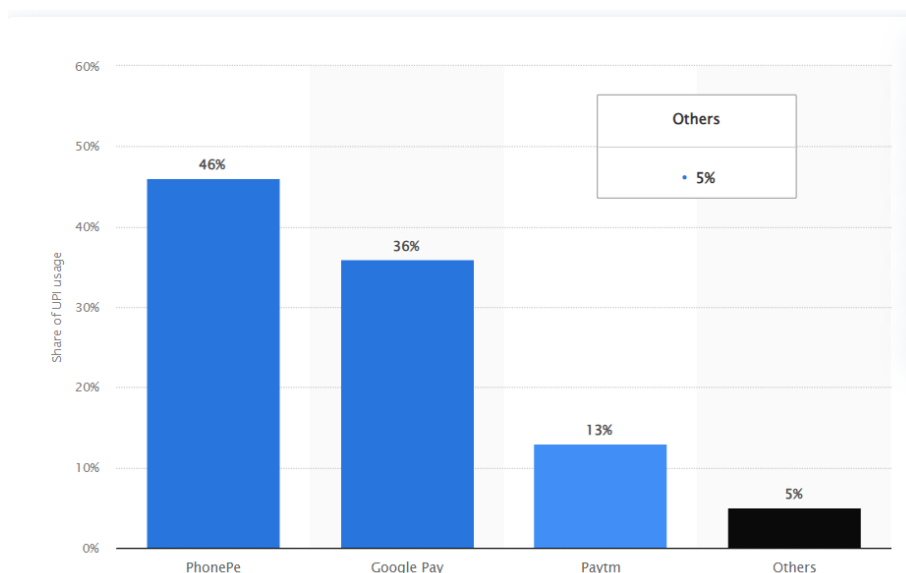
It is a digital wallet and payment platform from Google. It enables users to pay for transactions with Android devices in-store and on supported websites, mobile apps and Google services, like the Google Play Store. Users link credit or debit cards to their Google Pay account, which is used for making the transactions for in-store or online purchases.

Google Wallet was the company’s first mobile payment system, developed for Android devices in 2011. In 2015, it was renamed Android Pay, with Google Wallet refocused to strictly peer-to-peer (P2P) payments. In 2018, Google announced that Google Wallet would join the other payment offerings under the Google Pay branding. Google Wallet was then renamed Google Pay. Google Pay is available for contactless payments on Android devices.

The peer-to-peer functions and account access are available on iOS. The Google Pay service works with hundreds of banks and payment providers. Specifically, cards from Visa, MasterCard, Discover and American Express are called out for support.

There is also a Google support site list of featured stores and transit agencies that support Google Pay. Users should look for the Google Pay symbol or contactless payment symbol on a terminal.

Chart 1: chart showing the UPI usage in India.



Source: Statista

5. FINDINGS & SUGGESTIONS:

The findings of the study shows that Both UPI applications are very user friendly. Easily can be installed and simultaneously used in various bank accounts provided that have been linked to it.

We can see that Google pay is more preferred over phone pe in day today applications as per the above study results. Based on user friendly, convenience, trust and security aspect we can say that Google pay is more used compared to Phone pismire application usage of the UPI app will encourage more customers to start using various digital payment applications and making the country cashless economy.

6. ABCD ANALYSIS OF UNIFIED PAYMENT SYSTEM:

ABCD analysis is one of the research technique utilized to assess, analyse and evaluate the ideas, decisions, technology and business models. The advantages, benefits, constraints and disadvantages relating to the given topic “Digital payment applications: A comparative study with reference to Phone Pe & Google pay” is explained below:

7. Advantages:

- UPI system is very simple method which is easy to understand and operate.
- The payments do not involve transaction cost.
- The amount of payment limit has been extended for medical and school fees facility.
- Many accounts can be linked and operated with help of one application.
- There are multiple uses of UPI linked payment system in day to day operational payments.

7.1 Benefits:

- It provides robust security features for the safety of transactions.
- It provides convenience and enhanced security to the customers money.
- It includes two factor authentication, including pin and biometric verification to authenticate the users and prevent unauthorized access.
- Funds can be transferred easily from one account to another without any charges.
- In UPI payments knowing account number and IFSC code is not necessary.
- UPI platforms provide many rewards and cashback facility on most of the transactions thus it encourages savings among customers.
- With digitalization there will be an end for black money transactions, increased compliance and increases the revenue to the government.

7.2 Constraints:

- Limited knowledge about digital payment system among rural people.
- Sometimes due to network issues and bank server issues delay occurs in payment.
- There is a limit in number of transactions and amounts in UPI.
- The redressal of grievances of customers will take more time sometimes in the operations like delay in refund, failed transactions, incorrect debit etc.
- Lack of access to internet and mobile phones limiting the spread of UPI payments.

7.3 Disadvantages:

- As there are no additional charges on UPI transactions so in future it may increase maintenance cost. Due to lack of digital literacy most of the people are not able to use UPI payments.
- Due to the tax threat people think using cash is the best option rather depending on digital payments. The first-time user experience is often brief due to limited application guidance and training.

8.CONCLUSION: It also resulted in increased adoption by customers. Even though UPI faces cyber threats and technological challenges, it has lot of opportunities in today's digital world due to its unique strengths like simple, innovative and cost effectiveness to make more secure than extant payment system with its mass application results in financial inclusion in India and make huge population to be a part of digital economy paid a role of promoting financial inclusion by enabling people without traditional bank accounts to participate in mobile payments or digital payments. Both google pay & phone pe both made remarkable contribution in the digital payment landscape because of the factors such as security enhancement, user education and regulatory support.

9.REFERENCES:

- [1] High-Level Committee on Deepening of Digital Payments.
- [2] Roy, S., & Sinhala, I. (2014). Determinants of Customers' Acceptance of Electronic Payment System in Indian Banking Sector–A Study. *International Journal of Scientific and Engineering Research*,5(1),177-187.
- [3] Mahesh A., & Ganesh Bhat. (2021). Digital Payment Service in India - A Case Study of Unified Payment Interface. *International Journal of Case Studies in Business, IT and Education (IJCSBE)*, 5(1), 256–265. <https://doi.org/10.47992/IJCSBE.2581.6942.0114>
- [4] Rasna T P &SusilaA(2021), Comparative Study on the Usage Pattern of UPI Payments among Rural and Urban at Kannur District of Kerala,worldwide journal of multidisciplinary research & development,7(8),20-24.
- [5]ShankararamanGanapathyraman& Suresh Sugumaran(2021),Design engineering A study on UPI transactions in Chennai city,Journal of Design engineering(Toronto),7,10431-10440.
- [6] Sahib, AlanaMade; Khalid et.al.(2021).Digital payment adoption : A review(2015-2020),Journal of management information 7 decision science, 24(7), p1-9.
- [7] Anal R & Suresh A(2019),A study on customer satisfaction of Bharat Interface for money, International journal of innovative technology and exploring engineering ,8(6),2278-3075.
- [8] Rahul Gochhwal(2017),Unified payment interface-An advancement in payment system,American journal of industrial & Business management,7(10),1174-1191.
- [9] VardaSardana and ShubhamSinghania(2018) Digital technology in the realm of banking: A review of literature, International journal of finance and management,1(2),28-32
- [10] Dr. M Sumathy and Vipin KP(2017).Digital payments systems: perception & concerns among urban consumers, International Journal of Applied Research,3(6): 1118-1122
- [11] Aparna J Sharma et.al.(2021). A Literature Study Of Consumer Perception Towards Digital Payment Mode In India, Psychology, and education,58(1),3304-3319, DOI: 10.17762/page.v58i1.1270
- [12] SuadBećirović, S. (2014). Challenges facing e-money. *University Journal of Information Technology and Economics*, VOL.1, 28–36.
- [13] Sunny Gupta &Dr. Dinesh Kumar (2020).UPI - AN INNOVATIVE STEP FOR MAKING DIGITAL PAYMENT EFFECTIVE AND CONSUMER PERCEPTION ON UNIFIED PAYMENT INTERFACE, The International Journal of analytical and experimental modal analysis(I),2482-2491
- [14]Dr.KratikaNeema&Dr. Arpit Neema (2018).UPI (Unified Payment Interface) –A new technique of Digital Payment: An Explorative Study, International Journal of Current Research in Multidisciplinary (IJCRM) ISSN: 2456-0979, Vol. 3(10) pp. 01-10.
- [15] Rakesh N, et al. (2018). UPI: The Growth of the Cashless Economy in India. *Arabian Journal of Business and Management Review (Oman Chapter)*, Special Issue, 36-40.

[16] Aithal, P. S. & Suresh Kumar, P. M., (2016). ABC Model of Research Productivity and Higher Educational Institutional Ranking. International Journal of Education and Management Engineering (IJEME), 6(6), 74-84.

[17] Aithal, P. S., Shailashree, V. T. & Suresh Kumar, P. M. (2016). Analysis of NAAC Accreditation System using ABCD framework. International Journal of Management, IT, and Engineering (IJMIE), 6(1), 30-44.

[18] Aithal, P. S., Shailashree, V. T. & Suresh Kumar, P. M., (2016). Analysis of ABCD Model of Annual Research Productivity using ABCD Framework. International Journal of Current Research and Modern Education (IJCRME), 1(1), 846-858.

[19] Aithal, P. S., Shailashree, V. T. & Suresh Kumar, P. M. (2016). Application of ABCD Analysis

Framework on Private University System in India. International Journal of Management Sciences and Business Research (IJMSBR), 5(4), 159-170.