

A Study on Comparative Analysis of Digital Payments India V/S America

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Abstract— With the assistance of the Indian government, we achieved a milestone in the era of digital payments in 2016. The government has issued directives to move towards a cashless society, and the National Payments Corporation of India (NPCI) has developed UPI (Unified payment interface), the first of its kind in the whole world. Every element of Indian society has seen significant transformation as a result of the digital surge. But in reality, digital payments were introduced to the American market earlier. For many years, PayPal's online payment platform had an impact on daily life in America. In this paper we have tried to escalate the comparative analysis between the countries like India V/s America how the Digital payment transactions got substantial growth in India and why not in America as a biggest leading country in all the angels. Indians have substantially changed their payment methods since COVID-19. There had already been a considerable shift out of cash and cheques and towards real-time, digital transactions, but COVID-19 exacerbated the need for payment solutions that could keep up with evolving consumer behavioral trends. The study is based on secondary data by using appropriate research methodology we try to bring out the reasons to steady growth of DIGITAL PAYMENTS in USA and How Fintech played a vital role to accelerate the boom of DIGITAL PAYMENTS in India. Over 141 crores of population in India more than 81.05% is literally using DIGITAL PAYMENTS wherein, USA lagging with 60-65% of usage in real time payments as per 2023 statistics.

Index Terms- Digital payments, Economy, Fintech, Comparative analysis, COVID-19

I. INTRODUCTION

The study focuses on the modifications made to the Indian economy following the emergence of digital payments and examines them with the situation in America. The research findings can offer a cross-border view on the evolution of digital payments in India and America.

With the assistance of the Indian government, we achieved a milestone in the era of digital payments in 2016. The government has issued directives to move towards a cashless society, and the National Payments Corporation of India (NPCI) has developed UPI(Unified payment interface), the first of its kind in the whole world. Every element of Indian society has seen significant transformation as a result of the digital surge. But in reality, digital payments were introduced to the American market earlier. For many years, PayPal's online payment platform had an impact on daily life in America. In this paper we have tried to escalate the comparative analysis between the countries like India V/s America how the Digital payment transactions got substantial growth in India and why not in America as a biggest leading country in all the angels. Any country's economy depends upon the growth of technological advancements and Adoption of technological changes. Hence Indians have drastically adopted the change in their payment methods post covid-19. But COVID-19 deteriorated the need for payments solutions that could keep up with changing behavioral patterns among consumers; there had already been a significant shift from cash and cheques and towards Real-time, Digital wallets and Digital payments or UPI transactions.

The study is based on secondary data by using appropriate research methodology we try to bring out the reasons to unhurried growth of DIGITAL PAYMENTS in USA and How Fintech played a vital role to accelerate the boom of DIGITAL PAYMENTS in India. Over 141 crores of population in India out of that 81.05% to 90% of population literally using digital payments wherein USA backing with 53%-65% of usage in real time payments as per 2023 statistics. The major issues relating to slow growth of Digital payments in USA what apprehended by India as an opportunity to race in this digital world. The

study focuses on the modifications made to the Indian economy following the emergence of digital payments and examines them with the situation in America. The research findings can offer a cross-border view on the evolution of digital payments in India and America.

OBJECTIVES:

- To analyze the factors contributing Indian digital payments to grow in Rocket speed.
- To examine the factors that impacts the usage of digital payments in both the countries.
- Examine the regulatory frameworks governing digital payments in India and America.

II. LITERATURE REVIEW

Soumya Ray and J.P. Shim (2018) "The Adoption and Use of Mobile Payment Services: A Comparative Study of India and the United States" this study compares the adoption and use of mobile payment services in India and the United States. It investigates factors influencing consumer adoption, including perceived usefulness, ease of use, security concerns, and trust. The research provides insights into the differences in consumer behavior and adoption rates between the two countries. Raghavendra Rau, Harsh Suri, and Yogesh Singh (2020) "Digital Payments and Economic Growth: Evidence from Cross-country Analysis" This study analyses the correlation between digital payments and economic growth in a wide range of countries, including India and the United States. It investigates the impact of digital payment usage on a broad spectrum of macroeconomic metrics such as GDIGITAL PAYMENTS growth, financial inclusion, and productivity. The study demonstrates a beneficial relationship between digital payment usage and economic development. Avijit Sarkar and Samia Rahman (2020) "Digital Payment Systems: Comparative Analysis of India and the United States" This research provides a comparative assessment of digital payment systems in India and the United States. It delves at the essential characteristics, adoption rates, regulatory systems, and issues that both countries confront. The study focuses into the similarities and variations in digital payment environments, as well as the factors impacting their various growth trajectories. Priyanka Upadhyay and P.K. Jana (2020) "Factors

Influencing the Adoption of Mobile Payment Services: A Comparative Study of India and the United States" This study analyses the factors driving the uptake of mobile payment systems in India and the United States. It studies the role of perceived usefulness, convenience of use, trust, security, social impact, and demographic factors in driving consumer adoption behavior. The study delves into the similarities and variations in the adoption trends and variables driving mobile payment adoption in both nations. Lv, Yanan (2020) The Impact of digital payment on China: compared to the United States. In their study they have identified that China has significance relationship in growth and development of Digital payments with the country's economy, on the other hand since it's a comparative study USA did not have much impact on their development of Digital payments with economy of the country. There is huge scope for Collecting more information and data to compare the operation mechanism and security system between both the countries. Rajiv Rajpal and Anandhi Bharadwaj (2021) "Consumer Adoption of Mobile Payment Systems: A Comparative Study of India and the United States" This study compares the consumer adoption of mobile payment systems in India and the United States. It examines factors such as perceived usefulness, perceived ease of use, trust, security concerns, and social influence that influence consumer adoption behavior. The research provides insights into the similarities and differences in the adoption patterns and identifies key drivers of mobile payment adoption in both countries.

III. RESEARCH GAP

The current comparative qualitative ethnographic study sought to explain why new digital payment services were embraced more quickly in India than in the United States of America.

Furthermore, studies identified the primary reasons why mobile payment did not take off globally in the 2000s. Hence, a deeper knowledge of these aspects among the most successful adopters may aid in explaining the mechanisms of acceptance and growing popularity of mobile payments in other countries in recent years. To solve these research gaps, this study used India V/s America as a sample for a comparative case study. In this India is getting more and more wide

acceptance and popularization from across the world as a whole. But why is America lacking in improving its Digital payments speed. Hence recent studies says that gradual increase in adoption of Digital payments in USA they believe in Card payments rather than online mode of transactions because of lack of trust, The trust in digital payments is still lacking. Some people don't feel secure using this because they don't trust the Internet or the alleged cyber security dangers. For many people, the idea that someone else has access to their bank account is catastrophic.

IV. RESEARCH DESIGN

The majority of the data for this study was obtained from open-source websites of various organizations. This study mainly based on the descriptive method and exploratory method. The sampling used here is the convenience sampling for the respondents. It is the detail of all the necessary steps taken to obtain the information required to solve the research problem. The study is concerned with finding out the analyze the factors affecting Indian digital payments to grow in Rocket speed and also tries to examine impacting factors that will increase the payments in India and the Importance of governing authority of Digital payments in India and USAs.

V. DATA COLLECTION

- To analyze the factors contributing to digital payments to grow in Rocket speed

The remarkable surge in digital payments in India is a tailwind that merchants of all sizes cannot afford to ignore. In fact, the winners and laggards of tomorrow will be defined by their ability to effectively implement digital payments and thrive on the opportunities given by India's ever-changing digital payments ecosystem.

A greater understanding of Consumer adoption of digital payments has increased in recent years, particularly following demonetization in November 2016. Millennials and Generation Z consumers are more comfortable with and frequent utilization of digital payments. Merchants who do not accept digital payments will lose a sizable portion of their revenue.

Covid-19

Government policies the present government's commitment on developing a cashless economy in India has resulted in the implementation of many rules that benefit merchants who integrate digital payments. User-friendly interface and quick on boarding, gone are the days when modern technology hindered the adoption of digital payment systems in India. At Pine Labs, for example, we leverage best-in-class technology to develop products that are simple to use and help merchants build their businesses. And also have a concentrated customer on boarding team to assist merchants in adopting digital payment systems. Smartphone ubiquity and Internet expansion According to recent statistical study refers that India's Smartphone user base is predicted to double to 859 million by 2022, up from 468 million in 2017? Add to that the fact that India (12%) has surpassed the United States (8%), becoming the world's largest internet user base, according to Mary Meeker's Internet Trends Report 2019. These findings indicate that digital payments will only continue to grow in the future.

- To examine the factors that impacts the usage of digital payments in both the countries.

It is very important to understand that Digital Payments has become the integral part of our life, that we use Digital Payments anywhere you name me the place it will work like Small kirana shop to big Multiplex malls.

The major factors that impact the usage of Digital Payments in India is, India has become the World's largest country in adoption usage and of Digital Payments. Digital payments contribute 11% to 15 % of India's Digital Payments. Digital payments make up 46% of all digital payments in the world, and UPI transactions account for 80% of all digital payments in India. Fortunately The data given According to Statista, the percentage of people using cash transactions at POS (Point-of-Sale) stood at 76 percent in 2018, which declined to 64 percent in the third quarter of 2023. Hence population of India driven by Digital payments to the maximum extent. Digital payments has multiple levels of authentication where it is trustworthy and less errors while payments and within fraction of seconds you can make and receive payments, The ease of use is one of the ,major Advantage for Digital payments to accelerate the

usage and adoption in India. According to studies made by Ankita Kumari, Dr Pavnesh Kumar Arun Kumar in their research study aims to evaluate the factors that influence digital payment methods and customers' behavior in the age of e-commerce, with a focus on mobile payment. The findings of the research indicate that perceived usefulness, perceived Ease of use, perceived trustworthiness; subjective norms, attitude, and intention are the factors that influence the decision to adopt digital payment methods. This study is vital for academicians and researchers as it provides empirical evidence of the factors influencing customers' adoption of digital payment methods. User experience and convenience are important factors that influence how customers behave while using digital payments. The government's policies and laws play a major role in encouraging the use of digital payments in India.

But in America They Pay with cash, card, specialized wallets, or even traditional checks the US payments market is highly innovative and diverse, and accommodates every need. In comparison to other countries, the United States made a slower shift to modern digital payment infrastructure. The Pandemic Impact the COVID-19 accelerated the adoption of digital payments, as people sought contactless methods to minimize the risk of virus transmission. Businesses and consumers turned to online and mobile payment options to maintain social distancing measures.

- Examine the regulatory frameworks governing digital payments in India and America

Various regulatory authorities in India control the digital payment industry, including the RBI, the NPCI, and the Ministry of Electronics and Information Technology.

Reserve bank of India & National Payments Corporation of India: (RBI AND NPCI) The RBI oversees and supervises India's digital payment systems, which include electronic currency transfers, prepaid payment instruments, and card payments. It establishes rules and regulations for digital payment system security, risk management, client protection, and other issues. The NPCI runs and oversees payment systems like UPI, Immediate Payment Service ("IMPS"), and Bharat Bill Payment System ("BBPS").

It is in responsible of developing and operating these systems, ensuring their efficiency and security, and resolving any payment-related concerns.

Payment and Settlement Systems Act, 2007

All digital payments in India, including those made using mobile wallets, prepaid cards, and online platforms, are governed under the Payment and Settlement Systems Act of 2007. The act establishes a framework for regulating and monitoring digital payment service providers, as well as criteria for client protection and dispute resolution. It also authorises and oversees payment system operators, as well as promulgates regulations to safeguard the safety and efficiency of the digital payments industry.

Trends and Future Outlook

India's digital payments industry is projected to continue to flourish in the coming years. With initiatives such as the UPI, Bharat QR, and the adoption of digital wallets in India, the use of digital payments is expected to grow even more. The COVID-19 pandemic has expedited the migration to digital payments, as individuals fear physical touch with cash.

In terms of the future, there is a rising interest in leveraging emerging technologies like block chain and artificial intelligence to improve the security and efficiency of digital payments. The government is also likely to continue its efforts to promote digital payments through various initiatives and legislation. Overall, the future of digital payments in India appears positive, with the potential to alter payments.

VI. WHERE IN AMERICA

For most people living outside of North America, the US payments market is both vast and inaccessible. Players like Venmo and Zelle have little or no recognition outside of that industry; in fact, they are worthless in most situations. Nonetheless, they are massive corporations, technology-driven businesses in a globally relevant market.

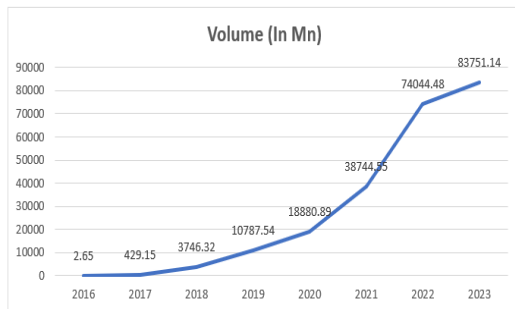
The US has tech-savvy users who quickly adopt new formats. Personal checks are still used, and there are check-cashing services available for the vast portion of the US population that is either underprivileged or

unbanked, or refuses to use the banking system. There is also a large cash economy.

The trust in digital payments is still lacking. Some people don't feel secure using this because they don't trust the Internet or the alleged cyber security dangers. For many people, the idea that someone else has access to their bank account is catastrophic.

VII. DATA COLLECTION & ANALYSIS

India's Digital payments overview



Source: NPCI, Reserve bank of India

- In 2017, UPI recorded a YoY growth of 900%, processing over 100 million transactions worth INR 67 billion.
- In 2018, the YoY growth was 246% with transactions worth over INR 1.5 trillion processed.
- In 2019, the YoY growth was 67% with transactions worth over INR 2.9 trillion processed.
- In 2020, UPI recorded an YoY growth of 63% with transactions worth over INR 4.3 trillion processed in December 2020.
- In 2021, the YoY growth was 72% with over 1.49 billion transactions worth INR 5.6 trillion processed in June 2021[5].
- At the end of the calendar year 2022, UPI's total transaction value stood at INR 125.95 trillion, up 1.75 X year-on-year (YoY), as per the NPCI. Interestingly, the total UPI transaction value accounted for nearly 86% of India's Digital Payments in FY22[8]
- At the end of the calendar year 2023, UPI's total transaction volume stands on 83.75 Billion.
- These statistics showcase the increasing popularity and adoption of UPI as a convenient and secure platform for digital transactions in India.

- The increase in internet and Smartphone penetration in India has also played a major role in the growth of the digital payments ecosystem. E-commerce has also been a major driver of the growth of the digital payments ecosystem in India. The e-commerce market in India is expected to grow at a CAGR of 31% and reach \$200 billion by 2026. The growth of the e-commerce market has led to an increase in the number of online shoppers in India, which is expected to reach 220 million by 2025. Numerous more private entities also contribute to the digital payments ecosystem in India. These players offer a range of digital payment services such as mobile wallets, UPI payments, and QR code-based payments.
- In USA they think that Digital payments can also improve government service delivery, such as allowing government employees to receive their wages regularly. According to one analysis, digitalizing government payments could create value of roughly 1% of Digital Payments of United States.

VIII. RESULTS AND CONCLUSIONS

Digital payments have emerged as a significant force in India's economy, spurred by the government's push for a paperless society and technological advancements. The Digital payments are showing that country can grow to its maximum extent by using and adoption. It has been proved that Digital payments boosted the economy of India at the end of the calendar year 2023, UPI's total transaction volume stands on 83.75 Billion. And the statistics says that Digital payments Contribute approximately 11 to 15% of Total GDIGITAL PAYMENTS of India. As India transforms to a more digital economy, the future outlook for digital payments seems good, with the sector expected to develop rapidly. The adoption of new technologies such as UPI and e-RUPI, as well as the increasing penetration of smart phones and internet connectivity, will help to drive the growth of digital payments. The regulatory environment for digital payments in India is continually evolving to keep up with the changing landscape, with the PSS Act serving as a firm basis for ensuring security and privacy.

In comparison to other countries, the United States made a slower shift to modern digital payment

infrastructure. Many businesses, particularly smaller ones, were unable to handle digital transactions due to the high cost and complexity of advancing their systems. Some people were wary of digital payments due to concerns about privacy and data tracking. The fear of personal information being shared or misused deterred them from embracing digital payment methods. It's worth noting that the situation may have changed since then, as the landscape of digital payments is constantly evolving. Businesses, government initiatives, and advancements in technology might have addressed some of these barriers and encouraged greater adoption of digital payment methods.

JEL classification: E42, G18, G23, G28, O30, O38

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