



INTERNATIONAL JOURNAL OF ADVANCE RESEARCH, IDEAS AND INNOVATIONS IN TECHNOLOGY

ISSN: 2454-132X

Impact Factor: 6.078

(Volume 12, Issue 3 - V12I3-1161)

Available online at: <https://www.ijariit.com>

Digitalization of Payments and GDP- A Global Perspective

Rishaan Lulla

rishaansanjayl@gmail.com

Bombay Scottish School, Maharashtra

ABSTRACT

This paper focuses on the growing importance of digital payment systems in facilitating the evolution of contemporary economies through increased efficiency and transparency in transactions as well as greater financial inclusiveness. Moreover, the comparison of the adoption and consequences of digital payments in advanced economies and EMDEs is analyzed. The development of technologies such as artificial intelligence and the Internet of Things contributes to increased efficiency, reliability, and safety of payments while posing threats that must be addressed. The paper considers the economic implications of digital payment systems, paying particular attention to their development in EMDEs, where the use of digital payments has been growing rapidly since 2014. In EMDEs, the percentage of adults using digital payments grew dramatically from 2014 to 2021. This paper considers the link between digital payment adoption and economic development by analyzing GDP per capita, total factor productivity, and employment in the informal economy. The paper also considers the role of central banks in fostering digital financial systems by providing efficient payment infrastructure and inclusive monetary policies. Overall, the study investigates whether digital payments have supported financial inclusion, economic modernization, and sustainable economic growth.

Keywords: Digital Payments, Cashless Economy, Financial Inclusion, Transaction Efficiency, GDP Growth, GDP Per Capita, UPI, Payment Cards, Internet Banking, Mobile Payments, Economic Development, Digital Infrastructure, Cybersecurity, Fraud Detection, Machine Learning, Artificial Intelligence, Internet of Things, Contactless Payments, Economic Indicators, Digital Adoption, Emerging Economies, Developed Economies, Data Privacy, Payment Systems, QR Code Payments, Real-Time Transactions, Mobile Wallets, Banking Access, Transaction Security, Digital Literacy.

INTRODUCTION

A digital payment is an action that transfers money or exchange value through electronic means, such as smartphones, computers, cards, or online banking, instead of cash. Examples of digital payments include bank transfers, wire transfers, eChecks, mobile wallets, and crypto wallets, including cryptocurrencies. Digital payments can be conducted securely over the internet, and they enable the transfer of money from one person directly to another without using cash.

Due to their speed, convenience, and higher level of security compared to old cash-based transactions, digital payments have gained popularity among consumers and companies. These transactions are characterized by instant, 24/7 transactions; efficient bookkeeping; and security measures like encryption and tokenization. Consequently, there is an increasing expectation from consumers regarding fast, cheap, and efficient payment transactions.

Digital payments work in the following way-

Initiation- The transaction is initiated by the payer selecting a mode of payment and filling out relevant details.

Authentication- The payer authenticates his or her identity through entry of a PIN, fingerprint identification, sending of a one-time password, or any other form of verification.

Data Encryption- Information relating to payment transactions is encrypted to safeguard it against unauthorized access.

Payment Processing- The payment transaction details are sent to a payment gateway for validation of the payer's details and evaluation for compliance with security policies.

Authorization Request- The payment processor seeks authorization from the payer's bank or financial institution to withdraw the amount agreed on.

Transfer of Funds- After receiving authorization, the transaction proceeds to transfer funds from the payer's account to the payee's account through banks, clearing houses, or payment processors.

Notification- Payers and payees usually receive notifications confirming the successful execution of their transaction.

Record Keeping- The payment process is documented and kept as an electronic record by both parties to the transaction.

CASH V/S DIGITAL PAYMENTS

Digital payments are changing economies by making the process faster, more secure, and more efficient than traditional cash payments. Digital government payments save on travel time and enable greater access to financial services and financial inclusion, particularly among those with lower incomes. Digital payments through real-time payments, mobile banking, and digital identification make economies grow, operate transparently, and develop their financial system. Many economies go cashless using various payment options like UPI, QR codes, mobile wallets, and POS systems post the coronavirus outbreak. Nonetheless, cash is also helpful where there is little digital infrastructure but due to the growing infrastructure and connectivity, it is evident that the future of transactions in will be largely cashless.

Feature	Cash Payments	Digital Payments
Mode of Transaction	Physical currency	Electronic transfer
Convenience	Requires carrying cash	Can be done anytime using phone/card
Speed	Slower for large transactions	Instant or real-time
Record Keeping	Difficult to track	Automatically recorded
Security	Risk of theft/loss	Protected through PINs and encryption
Accessibility	Useful without internet	Requires device/internet access
Transparency	Less transparent	Highly traceable
Business Growth	Limited scalability	Supports online and global business
Financial Inclusion	Limited banking connection	Helps people access banking services
Cost Efficiency	Printing and handling cost	Lower transaction and handling costs

TYPES OF DIGITAL PAYMENTS

1) Payment Cards

Payment cards are one of the most common methods of digital payment. They are plastic cards linked electronically to a bank account or credit account of the cardholder. Payment cards are used to facilitate cashless transactions and help verify the user's identity. To use a payment card, details such as the card number, expiry date, and CVV number are required. These cards also use two-factor authentication, such as a PIN or OTP, to reduce the risk of fraud.

a) Credit Card

A credit card allows the cardholder to borrow money from the bank up to a fixed credit limit. The user can make purchases and repay the amount later. The cardholder can either pay the full outstanding amount by the due date or pay a minimum amount and carry forward the remaining balance. Credit cards are commonly used for shopping, travel, and online payments.

b) Debit Card

A debit card is directly linked to the cardholder's bank account. When a payment is made, the money is immediately deducted from the user's account. Debit cards are mainly used for daily transactions, ATM withdrawals, and online purchases.

c) Gift Card

A gift card is a prepaid card issued by a bank or retailer. It contains a fixed amount of money and can be used as an alternative to cash. Gift cards are typically valid only at specific stores or for a particular service and are commonly used as gifts.

2) Net banking

Net Banking, otherwise referred to as internet banking or online banking, is an e-banking service provided by banks through which the customers are able to gain access to their bank accounts through the use of a mobile application or website. This banking practice makes it possible to perform all financial activities at any point and from any place without needing to visit the actual banking office. Examples of some services include checking bank account balance, fund transfers, utility bill payments, mobile recharge, loan requests, checking account statements, and investing. Net banking reduces paperwork, saves time, and increases efficiency. Furthermore, net banking also helps boost the digital economy through cashless transactions.

3) Cryptocurrency

Cryptocurrencies are virtual/digital currencies that rely on cryptography for security and employ the use of decentralization technologies known as blockchains. Unlike ordinary currencies that are backed by governments or central banks, cryptocurrencies are typically not regulated by any one body. Bitcoin and Ethereum are common types of cryptocurrencies. They may be employed in various activities including payments, investing, and international money transfers, among others. They are inexpensive to use compared to traditional forms of currency since each of their transactions is stored in a publicly accessible digital ledger. Advantages associated with cryptocurrencies include speed, privacy, and accessibility, among others. However, disadvantages such as vulnerability to cybercrimes, price fluctuations, and lack of adequate regulation pose threats to the use of cryptocurrencies.

4) Mobile Payments/Digital Payments

A mobile wallet or digital wallet refers to digital payment systems utilized globally for saving cash and conducting electronic payments via smartphones or any other device. With the help of such digital wallets, individuals can connect their bank accounts, debit/credit cards, and other sources for making quick and cashless transactions. Some of the most popular digital wallets that have been recognized across the globe are PayPal, Apple Pay, Google Pay, and Alipay.

Digital wallets have found widespread applications in online shopping, contactless payments, money transfer, travel arrangements, and bill payments. Their use around the world has become more prevalent owing to rising trends in online transactions, smartphone utilization, and digital banking.

THE BENEFITS OF A DIGITAL PAYMENT SYSTEM

Digital payments offer several important benefits that support both individuals and the economy.

Speed and Convenience – Transactions are made in no time and can be made anywhere, anytime, via smartphones, computers or cards. It eliminates the need to use cash or long lines.

Better Security – Digital payment systems employ encryption, OTPs, PINs, and biometric verification, making them more secure than cash to protect against theft, fraud, and loss.

Better Record-Keeping – Each transaction is automatically recorded in digital form, making budgeting, tracking expenses, auditing and financial reconciliation easy for companies and people.

Financial Inclusion – Digital payments offer banking services to rural and remote populations, enabling them to access the formal banking system without the need of a physical branch.

Cost Efficiency – Cash handling, cash transportation, cash storage, security and manual processing costs are reduced for the businesses and banks.

Global Accessibility – Digital payment systems make international transactions and online purchases easy across countries with minimal major issues with currency. Encourages growth in e-commerce and internet-based services – Promotes ecommerce and digital subscription, food deliveries, ticket bookings and other online services. **Transparency and Accountability** – Digital records limit corruption, tax evasion, black money transactions, and financial fraud, because of a clear history of transactions.

Contactless and Hygienic Payments – QR codes, NFC cards, mobile wallets enable contactless payment, particularly after the pandemic.

Incentives and Rewards – Many digital platforms offer cashback, discounts, loyalty points, and promotional rewards, encouraging users to adopt cashless payments. Improved

Financial Management – Real-time tracking of payments, automated invoicing and bookkeeping enhance personal and business finances and efficiency.

Less reliance on cash – encourages cashless society, minimising risks associated with physical cash.

Accessibility – Digital payments are accessible at any hour, even on weekends and holidays, which is not the case with conventional banking hours.

Environment Friendly – Reduces paper currency and printed receipts and physical documentation, aiding environmental sustainability.

Risks/Disadvantages related to Digital payments

i. Risk Privacy

Risk privacy refers to concerns about how personal and financial information is collected, stored, and used during digital transactions. Many users worry about losing control over their data, misuse of information, and constant monitoring by banks or payment platforms. These concerns are especially strong among older users and those who were used to cash-based systems. Due to fear of data misuse, privacy becomes a major barrier to fully adopting digital payments.

ii. Risk Security

Risk security is related to the fear of fraud, hacking, data theft, and unauthorized transactions. Although digital payment systems offer technical security, many users feel that easy access makes them vulnerable to misuse. Security risk is often seen as the biggest concern in digital payments, influencing whether users trust and continue using these systems regularly.

iii. Risk Access

Risk access refers to difficulties in accessing funds or services through digital payment systems. Users worry about transaction failures, delayed payments, network issues, or a lack of customer support during problems. When users are unable to access their money quickly, confidence in digital payments decreases.

iv. Risk Personalization

Risk personalization relates to the lack of human interaction and personalized service in digital payment systems. Many users feel that digital platforms replace face-to-face banking support with automated and impersonal services. This affects customers who are uncomfortable with technology or prefer personal assistance, making them hesitant to fully depend on digital payments.

v. Risk Trust

Risk trust refers to the level of confidence users have in digital payment platforms. Trust is essential because users cannot directly monitor how platforms operate or protect their data. Differences in age, location, and experience with technology affect trust levels. Younger users generally trust digital payments more than older users.

INCREASE IN USAGE OF DIGITAL PAYMENTS

Digital payment systems are becoming a key catalyst that is reshaping the world economy. Digital payments are online banking, mobile wallet payments, QR code payments, contactless payments and instant bank transfer payments, which enable individuals and businesses to transact without the need for physical cash. The adoption of digital payments has accelerated significantly in developed and developing nations during the last decade due to the proliferation of smartphones, better internet connectivity, fintech innovations, and government initiatives to promote cashless payments. India, China, Sweden and Singapore have emerged as global leaders in digital transactions and real-time payment systems.

Grand View Research estimates the global digital payment market to be worth approximately USD 114.41 billion in 2024 and will increase at an annual rate of 21.4% until it reaches USD 361.30 billion by 2030. According to the report, over two thirds of the world's adults already use digital payments and this figure will continue to grow over the next few years. The rise is primarily attributable to rising penetration of smartphones, the growth of e-commerce, rising Internet penetration and the rising popularity of contactless and mobile payment methods. The COVID-19 pandemic also helped spur the growth of digital payment by encouraging consumers and businesses to migrate to ecommerce and contactless payment methods for safety and convenience.

Among the most promising developments of the last couple of years has been the mushrooming of mobile money and digital wallets. Mobile money transactions in the world were worth USD 2.1 trillion in 2025, which is up by 100% in just four years, according to a report mentioned by The Economic Times. The industry has come to its first trillion dollars in less than 20 years and doubled it in under 4 years, a testament to the industry's quick pace of growth in the global payments space. The number of active mobile money accounts grew 15% to 593 million users in 2025 and registered accounts increase to 2.3 billion worldwide.

Another key trend is the growing use of commercial and retail transactions, rather than just peer to peer transfers. In fact, merchant payments grew at the fastest pace at USD 155 billion worldwide, up 42%. Today, consumers are not only using mobile wallets to pay others but also to pay for shopping, transportation, food delivery, utilities, insurance, and saving. There have also been substantial improvements in the integration of banks and digital wallets, with bank-to-mobile and mobile-to-bank transfers becoming more prevalent around the world.

The trend for the future can be seen as a continued move towards digital payments over cash transactions around the world. AI, biometric authentication systems, blockchain, and embedded finance are all likely to enhance digital payment systems even more. The benefits of digital finance, such as enhanced efficiency, e-commerce, innovation, and economic development, continue to drive governments, banks, fintech firms, and global financial institutions like the World Bank and International Monetary Fund to support digital finance. But even with difficulties in the field of cyber security, fraud, and regulatory elements, digital payments are projected to be one of the largest growing trends in the global economy.

GDP AND GDP PER CAPITA

The GDP can be defined as the total monetary value of all final goods and services produced in an economy within a certain period, normally one year. The GDP is considered to be the major indicator of how well or bad an economy is doing. The GDP consists of consumer expenditure, investment expenditure, government expenditure, and the net export (export minus import). An increase in GDP shows that the economy is growing or expanding, there is more production and employment, and business is flourishing. On the other hand, the GDP does not account for income equality, the quality of life, or sustainability.

The GDP per capita is considered to be the economic output or income per person in the country. The GDP per capita is calculated by dividing the GDP of the country by its population. The GDP per capita is used to compare the living standards and economic development of different countries. A high GDP per capita signifies that the people in the country live better and have a higher access to goods and services.

IMPACT OF DIGITAL PAYMENTS ON ECONOMIC GROWTH

The digital payments revolution has revolutionized the financial ecosystem and altered the way people, businesses, and governments engage in payments. The surge in internet, smartphone use, mobile banking and financial technology (FinTech) has led to the massive proliferation of online, mobile, QR and contactless payments in both developed and developing countries. The advanced digital payment ecosystem has emerged as a hallmark of several countries, including India, China, Sweden, and Singapore.

Across the world, digital payment systems are now essential to the economy and are fast taking the place of cash payments. The total size of the global digital payment market was valued at around USD 114.41 billion in 2024 and is projected to expand to USD 361.30 billion by 2030 at a healthy rate of 21.4% annually. The expansion is largely due to the growth of e-commerce, the growing prevalence of Internet connectivity, universal smartphone usage and government initiatives pushing for cashless economies. Today, over 2/3 of adults globally are already using digital payment solutions and this figure is increasing by 40% or more annually especially in Asia-Pacific, the fastest growing digital payments market. The rise of mobile wallets, biometric authentication, QR-code systems, contactless payments, and other fintech innovations are among the current digital payment trends. The international community and governments support the adoption of digital finance as a way to enhance efficiency, financial inclusion, transparency, and emergency response. With the advent of the COVID-19 pandemic and soaring demand for online shopping and contactless payments globally, digital payment systems have gained significant importance.

One of the fastest-growing segments in digital finance is mobile money. In 2025, global mobile money transactions totaled USD 2.1 trillion, more than doubling in value over the last 4 years. The number of active mobile money accounts rose to some 593 million, and total registered accounts to some 2.3 billion globally. Digital payment use has grown beyond remittances to be used extensively when purchasing goods online, for utilities, savings, insurance, transportation and merchant payments. The payments by merchants are one of the most rapidly expanding categories, indicating a huge shift toward commercial and retail adoption in the digital financial system.

Digital payments also are helping to foster financial inclusion, particularly in developing nations where a large proportion of the population did not have access to formal banking services before. Now, millions of people can save, get paid, wire money and access financial services via their mobile phone. The interoperability of traditional banks and digital wallets is growing at a fast pace as well: bank-to-mobile and mobile-to-bank transfers.

DIGITALIZATION AND LABOUR MARKET

Digitization is changing the world of work and emerging as one of the greatest sources of job creation, productivity enhancement, and economic development. Digitization involves the growing deployment of technologies like artificial intelligence (AI), robots, cloud computing, digitized platforms, mobile applications, automation, and internet-based services in businesses and daily lives. While digitization tends to automate some of the traditional occupations, evidence indicates that, on the whole, it has a net positive effect on employment because of the emergence of new sectors, improvement in productivity, and creation of economic opportunities.

The first and most significant impact of digitization is job creation. The increased productivity arising out of digitization enables organizations to produce more goods and services, hence resulting in additional job openings that make up for the losses caused by automation. According to an estimate, even universal access to broadband Internet could potentially create around 24 million jobs by 2030. In addition, digitization accounts for roughly 5.47% increase in corporate employment.

It is not only creating new opportunities but also transforming the nature of some current occupations as well. According to experts, artificial intelligence and other forms of digitization will alter about 50-55% of all jobs in countries like the US over the coming years. Technologies will change the nature of work by automating routine activities and demanding more creativity, innovative thinking, communication skills, and knowledge of IT systems and software.

As a result, there is an increasing need for qualified specialists in software engineering, cybersecurity, artificial intelligence, machine learning, data science, digital marketing, fintech, and other tech areas. Workers' occupations are being transformed into more technology-oriented jobs.

The process of digitalization has also led to significant changes in employment in certain sectors. The decline of manufacturing employment has been observed due to the automation of manual labor by robots. Nevertheless, employment in the service sector has been growing rapidly. For instance, companies like Amazon, Uber, and Flipkart have generated employment opportunities in areas such as delivery, transport, logistics, application development, online retail, etc.

Growth in the gig economy has been another important influence. Thanks to digital technology, there have been many new opportunities for flexible work. The gig economy includes freelance work, transportation services such as Uber, food delivery services like Deliveroo, social media influencer marketing, among others. Work from anywhere has become more feasible due to digitalisation, providing global opportunities that one can pursue from home. During the coronavirus pandemic, many enterprises were able to keep their business going through digitalisation, preventing widespread job losses. Digitalisation helps foster entrepreneurship in developing countries through mobile banking and other digital payment systems.

In spite of these advantages, there are also some difficulties that come with digitalization. Automation negatively impacts unskilled workers, making reskilling and digital literacy essential. There is a shortage of qualified employees who can take on digital jobs. Moreover, the digital divide will increase inequality in poorer countries due to lack of access to technology.

Digitalisation in developed and developing economies:

The adoption of contactless payments shows clear differences between developed and emerging economies. These differences are mainly based on infrastructure, security, trust, and the purpose behind using digital payments.

Developed Economies

In developed economies such as the United Kingdom, the United States, the European Union, and Australia, contactless payments are already fully integrated into daily life. People use contactless cards and mobile payments mainly for convenience and speed. These countries have strong banking systems, stable internet connectivity, and strict regulations, which make digital payments safe and reliable. Financial institutions in these regions invest heavily in advanced security systems like multi-factor authentication and encryption. Regulations such as the European Union's Payment Services Directive ensure high security while keeping transactions fast and smooth. Because of this, consumer trust in digital and contactless payments is very high.

Emerging Economies

In emerging economies such as India, Nigeria, and Brazil, contactless payments are growing quickly, but for different reasons. Here, digital payments are often adopted out of necessity rather than convenience. A large section of the population is unbanked or underbanked, so digital payments play a major role in financial inclusion. Governments in these countries actively promote mobile payment systems. For example, India's Unified Payments Interface has made digital transactions affordable and easy, even for small merchants and individuals. However, emerging economies still face problems such as fraud, identity theft, weak cybersecurity enforcement, and inconsistent regulations. These issues reduce user trust in digital payment systems.

COUNTRIES UPCOMING IN UTILISING DIGITAL PAYMENTS

India

India is among the world's top countries for digital payments. The growth started with apps like Paytm and Google Pay, but the biggest game-changer was UPI. UPI made instant, low-cost digital payments possible for everyone, including small shops, through QR codes. After the pandemic, online shopping increased sharply, further boosting contactless payments. India recorded around 164 billion digital transactions in 2024, and the total value of UPI-based transactions crossed ₹200 trillion. Experts expect digital payment transactions to grow from about 159 billion in 2023–24 to over 481 billion by 2028–29.

China

China has seen massive growth in digital payments, with apps like Alipay and WeChat Pay dominating the market. These platforms are widely used by both consumers and merchants for daily transactions. China's digital payments market is expected to reach around USD 3,744 billion in 2024, with strong growth continuing over the next few years. This rapid adoption places China among the global leaders in digital payments.

South Korea

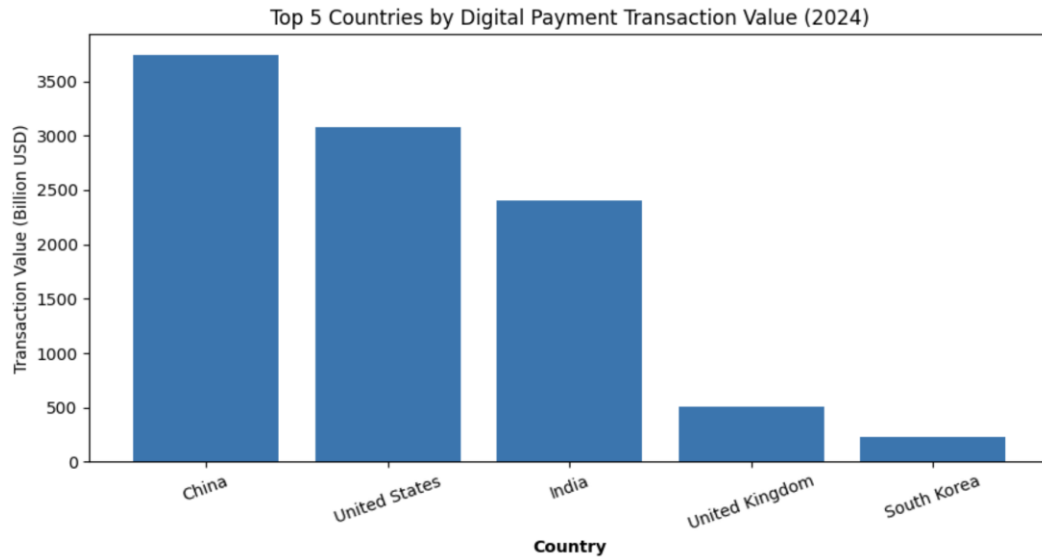
South Korea has almost fully digitized banking and peer-to-peer transactions. Payment apps like Kakao Pay, Toss Pay, and others are commonly used. After the pandemic, more businesses accepted online payments, increasing adoption further. The digital payments market in South Korea is projected to reach about USD 229.4 billion in 2024.

USA

Digital Transformation in the United States has seen rapid growth, with revenues expected to exceed US\$1,420.5 million by 2033, representing an average annual growth rate of 16.5%. The United States is among the world leaders in terms of artificial intelligence, cloud computing, and the Internet of Things, and its adoption of technology has increased its productivity by more than 7%.

United Kingdom

The United Kingdom has seen a sharp rise in digital payments in recent years. Digital wallets and online payment platforms are widely used, especially for e-commerce. After the pandemic, fintech innovation increased, and the total value of digital payment transactions in the UK is estimated to reach about USD 513.10 billion in 2024.



INTEGRATION OF AI AND ML IN DIGITAL PAYMENTS

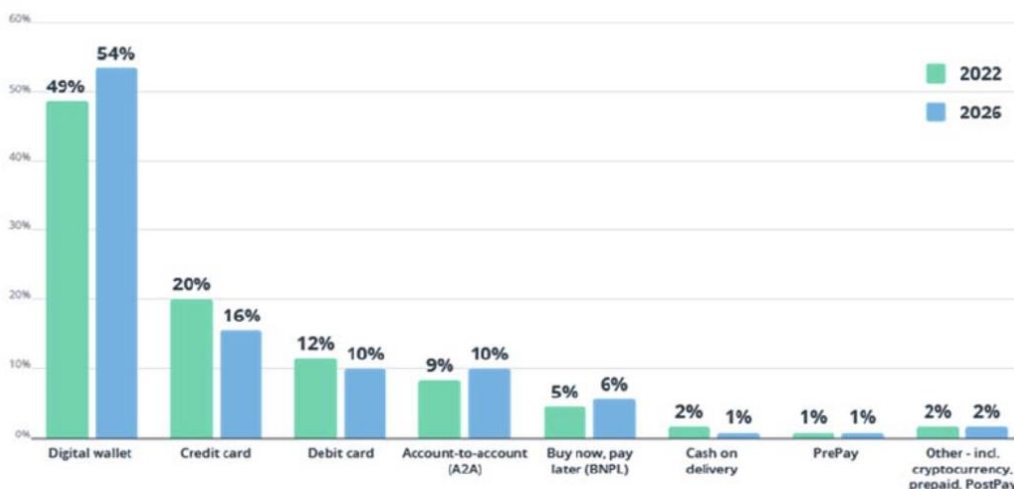
Modern payment systems handle hundreds of millions of transactions every day, and most of these are processed almost instantly. To make sure payments go through successfully, these systems work closely with banks, payment gateways, and card networks across the world. Payment systems, often called acquirers, receive millions of payment requests daily from merchants. Each payment request passes through several steps, such as routing, authorization, settlement, and reporting. One of the most important steps is routing. At this stage, the system decides which bank, gateway, or network the payment request should be sent to. Making the right routing decision increases the chances of payment success. Although these machine learning decisions may not always be fully visible to business users, they can still be explained. Explaining why a certain route was chosen, which terminals were considered, and what data influenced the decision helps identify hidden reasons for payment failures. This is critical because payment systems operate under strict service-level agreements and must maintain high reliability and speed.

Fraud detection and prevention in digital payments:

Fraud detection systems are used by banks and payment processors to monitor transactions and identify suspicious activity. These systems analyze transaction data to check whether a payment might be fraudulent. If an unauthorized transaction takes place, the bank or payment provider is usually responsible for the financial loss. Therefore, fraud detection plays a very important role in protecting both customers and institutions. Fraud detection is commonly handled using machine learning models that classify transactions as either normal or fraudulent. Past transaction history is extremely important because it helps the system understand normal spending behaviour and identify unusual activity. Events that occurred before the current transaction provide context and help detect anomalies.

However, fraud detection faces challenges because banks often have access to only partial transaction history. When a transaction involves an external account, the system can only see limited data, usually recent transactions and customer interactions. This makes it harder to build accurate behaviour profiles. To detect fraud, banks and payment processors use a mix of rule-based systems, supervised learning models, and anomaly detection techniques. While these systems are effective, they are not always transparent, which can create blind spots. Some fraudulent activities may go unnoticed if they closely resemble normal behaviour.

Most used payment methods in eCommerce worldwide with forecast for 2026



ROLE OF IOT IN THE AUTOMATION AND EFFICIENCY OF PAYMENT PROCESSES

The Internet of Things (IoT) plays an important role in making modern payment systems faster, safer, and more efficient. IoT enables devices to collect and share data in real time, which improves how payments are processed and secured. One of the biggest advantages of IoT in payment systems is real-time data usage. Connected devices such as smartphones, wearables, and smart appliances continuously generate data. This data helps build a detailed understanding of user behaviour, which allows payment systems to detect unusual patterns quickly and prevent fraud more accurately.

Contactless Transactions

Contactless payments have grown rapidly in recent years, and IoT has further boosted their adoption. Smart devices using Near Field Communication (NFC) technology allow users to make payments with a simple tap, swipe, or even a sound. This removes the need to carry physical cash or cards and makes transactions faster and more convenient for customers.

Biometric Authentication

IoT has also improved payment security through biometric authentication. Devices such as smartphones and tablets now use fingerprints or facial recognition to authorize payments. This reduces dependence on passwords and PINs, making transactions both safer and easier for users.

The integration of IoT into payment systems offers high levels of convenience, security, and efficiency. From real-time data analysis and contactless payments to biometric security and smart POS systems, IoT is reshaping how payments are made. However, to fully benefit from IoT-based payments, stakeholders must address issues related to security, standardization, and system compatibility.

Indian Scenario

In a country like India, where economic differences are very large, ensuring financial inclusion and equality is extremely important. One of the main reasons behind initiatives like Digital India and the push toward a cashless economy is to improve access to financial services for everyone.

Increased digitalization has transformed India into the world's third-largest digital economy, with the digital sector contributing 11.74% to GDP in 2022–23 and expected to reach nearly 20% by 2030. Growth has been driven by over 950 million internet users, widespread adoption of the Unified Payments Interface (UPI), and strong Digital Public Infrastructure such as Aadhaar and BharatNet. Expansion of 5G networks, rising rural connectivity, and growth in startups and AI industries have further accelerated digital transformation. Government initiatives like Digital India, DigiLocker, and the UMANG app have improved digital access, public services, financial inclusion, and economic productivity nationwide.

India has two additional digital payments system

1) Aadhaar Enabled Payment Service (AEPS)

AEPS, also known as Aadhaar Enabled Payment System, is a digital payment facility that allows users to transact their banking activities through the use of online authentication based on their Aadhaar. It becomes easier for users to conduct transactions using their Aadhaar enabled accounts through micro ATMs at anytime from anywhere. The management of AEPS system rests with the National Payments Corporation of India. Minimal information about the customer is all that is required to conduct an AEPS payment system. The requirements of the user include the user's biometric details of the fingerprint, their Aadhaar number, and the bank name/issuer identification number.

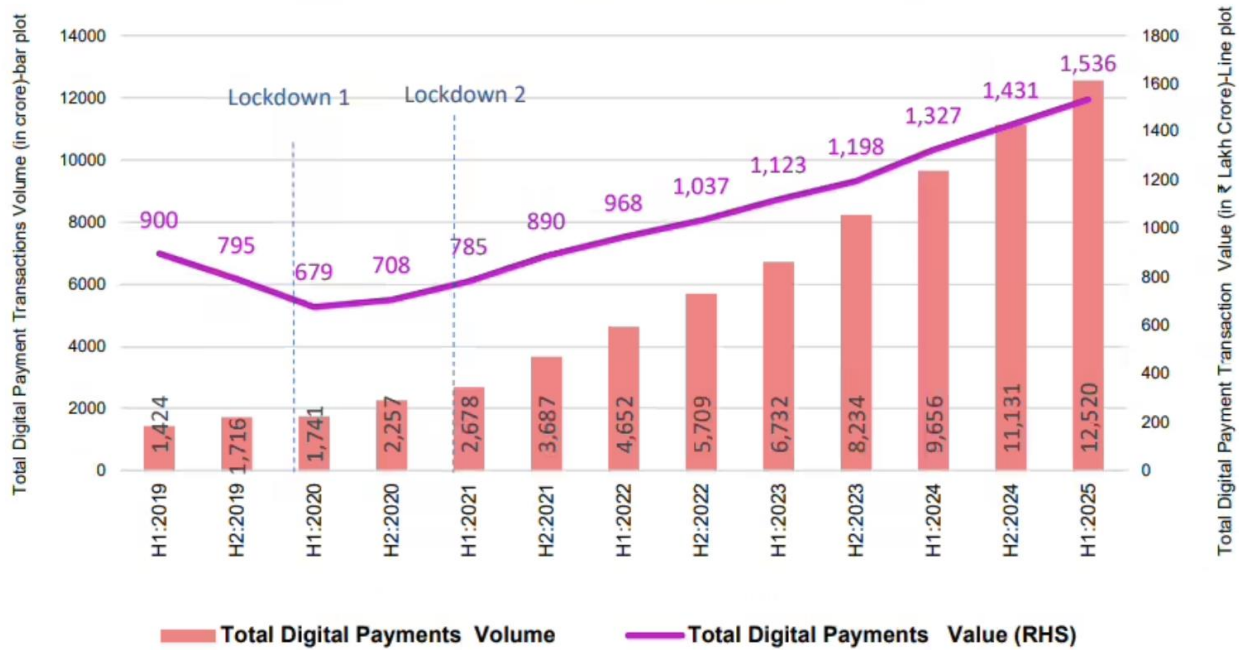
The use of an AEPS system allows people to withdraw cash from their bank accounts without using a debit card, cheque, or signature. Transactions can be conducted using AEPS without visiting a bank branch. This means that AEPS systems are especially useful in remote and rural areas where banks are not available.

2) Unified Payments Interface (UPI)

With the leadership of the government of India, the National Payments Corporation of India rolled out the Unified Payments Interface (UPI), a form of digital payment system whose aim was to facilitate mobile banking and foster a cashless society. UPI allows people through a single app to connect several bank accounts to gain access to multiple financial activities, including bill payments, money transfers, and merchant payments. One of the fastest payment systems globally is currently UPI. Almost everything in India accepts UPI, from small street vendors to giant retail outlets. Millions of transactions take place within seconds each day such that cash appears superfluous. UPI is at the core of the digital economy due to its efficiency, simplicity, and low or zero transaction fees.

UPI was officially launched on April 11, 2016, with 21 participating banks. It expanded at a fast pace, and by June 2021, the number of UPI-participating banks had risen to 227. Payment can be made using a UPI ID, cell phone number, bank account details, Aadhaar number, or QR codes. In 2018, when UPI got updated to UPI 2.0, the transaction ceiling was increased from ₹1 lakh to ₹2 lakh. Currently, with more than 22 billion transactions carried out monthly, UPI is the world's most extensive real-time payment system, having crossed the 20 billion transactions milestone in November 2023. UPI will soon observe its tenth year anniversary in May 2026, being the most extensively used digital payment system in India, accounting for more than 81% of all retail digital transactions and 49% of worldwide real-time payments, using AI-powered 2FA and penetrating foreign markets.

Even though there has been a remarkable expansion in digital payment usage in India, there are various problems that keep digital payments from being used extensively. Firstly, most of India's rural and remote regions lack digital infrastructure because they lack adequate internet and energy connections for conducting electronic payment procedures. Moreover, cybersecurity issues like cyber-fraud, hacking, and identity theft can hamper the use of digital payments in India because they are a threat to the safety of users' personal information. Besides, some people may favor using traditional forms of money rather than conducting digital transactions.



The above graph depicts India's transition toward a cashless economy. The rise in usage of digital payments has enabled the payments landscape in India to become more efficient, with 99.8% of all payment transactions taking place via digital channels in the first half of 2025. Based on the report by the Reserve Bank of India (RBI), digital payments account for 97.7% of all payment transactions.

REVIEW OF LITERATURE

1. "World's Top 10 Countries Moving To Digital Payments" Maximus Infoware, 24 September 2024.

This article reviews the top 10 countries advancing rapidly in digital payment adoption by modernising financial infrastructure and encouraging cashless transactions. It highlights how nations around the world are innovating with digital wallets, real-time payments, QR-based systems, and mobile banking to reduce dependence on cash and boost financial inclusion. India is featured among these leading countries due to its extensive use of mobile payment platforms and the government's push for digital transactions. The piece also notes that such progress reflects broader trends in digital financial ecosystems, where both developed and emerging economies are embracing technology to improve payment efficiency and reach.

2. "An Overview On Digital Payments" S Sahayaselvi, *International Journal of Research*, 336835369, October 2017

This study reviews how digital payments have expanded from traditional systems to electronic modes, particularly during periods of technological growth and policy changes such as demonetization in India. It explains that digital payments are cashless, instant, and convenient methods of transferring money using online systems and technologies. The paper describes various digital payment types, including payment cards, UPI, AEPS, digital wallets, and mobile banking, and notes that smartphone access and internet availability have been key drivers of adoption. It also finds that awareness and literacy about digital payment methods remain low, which limits widespread use and suggests education is essential to increase adoption.

3. "Digital payments and GDP growth: A behavioural quantitative analysis" – *Research in International Business and Finance*, March 2025, Article 102768. Andrea Birigozzi, Cristina De Silva, Prabesh Luitel.

This study investigates how the adoption of digital payments relates to GDP growth across multiple countries by incorporating behavioural factors such as individual biases and financial literacy. Using panel data analysis, the authors find that higher behavioural adoption of digital payments is significantly associated with increased GDP growth, showing that a 1% rise in digital payment adoption can boost the GDP growth rate by 6–8%. Digital payments are argued to reduce transaction costs, expand financial access, and reshape financial behaviours, underscoring the importance of including behavioural insights in policy design for sustainable economic growth.

4. "The Future of Contactless Payments: A Comparative Study of Adoption Trends in Emerging Vs. Developed Markets" Ogunjide, Ukatu, Juwah, Oreoluwa & Owoola-Adebayo. *American Journal of Financial Technology and Innovation*, 2025, 393041563

This study compares contactless payment adoption in emerging and developed economies. It finds that developed markets benefit from strong infrastructure, regulation, and consumer trust, while emerging markets face challenges such as limited infrastructure and security concerns. The paper highlights the need for better cybersecurity, digital literacy, and regulatory support to increase global adoption of contactless payments.

5. "A Study on Digital Payment System with Reference to NPCI" Research Project Report, G.S. College of Commerce and Economics, 2023-24, Aniket Manoj Gupta & Dr. Afsar Sheikh.

This research project examines the evolution and functioning of digital payment systems in India with a focus on the role of the National Payments Corporation of India (NPCI). It highlights key digital payment innovations such as UPI, IMPS, AEPS, and other NPCI-driven platforms, and discusses how these technologies have enhanced transaction speed, efficiency, and financial inclusion. The study also outlines the role of infrastructure, user awareness, and policy support in expanding digital payment adoption across urban and rural areas.

6. "Internet of Things (IoT) and Future of Digital Payments: Enabling Smart, Automated Transactions" Pushpalika Chatterjee. *Indian Journal of Computer Science and Engineering*, 392864843, May-June 2025.

This article reviews how the Internet of Things is transforming digital payments by enabling smart, automated, and real-time transactions that improve efficiency, security, and accessibility. It highlights that IoT devices like wearables and connected systems can support seamless and personalized payment experiences, but also notes that adoption, privacy, and data-security challenges must be addressed for the full benefits to be realized.

7. "The Impact of Digital Payment Systems on Economic Growth: A Case Study Approach" Dr. Surjeet Kaur. International Journal of Trends in Emerging Research and Development, Volume 2, Issue 6, 2024.

This paper examines how digital payment systems influence economic growth using a case study approach across both emerging and developed economies. It finds that digital payments improve financial inclusion, transaction efficiency, and transparency, which in turn reduce costs, foster entrepreneurship, and support GDP growth. The study also discusses regulatory and infrastructure challenges and offers policy recommendations to harness the full potential of digital finance.

8. "Digital payments and GDP growth: A behavioural quantitative analysis" Andrea Birigozzi, Cristina De Silva & Prabesh Luitel. Research in International Business and Finance, Article 102768, 2025.

This study examines how the adoption of digital payment systems relates to GDP growth across multiple countries by integrating behavioural factors like financial literacy and individual bias into the analysis. Using panel data, it finds a positive association between increased digital payment adoption and GDP growth, showing that each 1 % rise in adoption is linked with a 6 %–8 % boost in the GDP growth rate. The findings underline digital payments' role in reducing transaction costs, expanding access, and improving economic outcomes, and highlight the importance of behavioural insights in policy design.

9. "Going Cashless: A Study on the Impact of Digital Payments on the Economy of India," Ankita Sanghvi. International Journal of Creative Research Thoughts (IJCRT), May 2020, Paper ID IJCRT2005110.

This paper analyses the relationship between digital payment usage and economic growth in India from 2011 to 2019 by examining debit card, credit card, and UPI transactions and their effects on GDP at constant prices. Regression results show that debit card transactions have the strongest positive impact on GDP, while UPI's influence is limited because it is used for a shorter period in the dataset. The study highlights how digital payments reduce cash dependence and improve economic performance.

10. "The Impact of Unified Payments Interface (UPI) on India's Gross Domestic Product (GDP)", Prabhakar Krishnamurthy. 6 August 2025, 5357907.

This working paper examines how the Unified Payments Interface (UPI) has transformed India's digital payment landscape since its launch in 2016 and how this transformation contributes to GDP growth, financial inclusion, and the formalization of the economy. By analyzing transaction growth, effects on small businesses, and synthesizing data from NPCI and platform reports, the study argues that UPI has been a key catalyst for economic development and broader economic participation in India.

RESEARCH METHODOLOGY

Research is the process of gaining knowledge about a specific topic in a systematic and organized way. It is like a careful and detailed method of discovering new information. Some definitions describe research as a deep and thoughtful investigation. Methodology refers to how research is carried out. It includes the different methods, techniques, and tools, both qualitative and quantitative, that guide the research process. Research methodology helps us understand not just the results, but also how the research was done, along with the strengths, limitations, and overall impact of the methods used.

Statistical tools adopted

The data was collected, processed, and presented using different graphs and charts.

Sampling technique

The research paper used a topic-specific questionnaire consisting of 15 questions on the subject of digitization.

HYPOTHESIS

The hypotheses proposed in this research paper are as follows.

H0- Digitalization of payments does not have any positive impact on the GDP and economic growth.

H1- Digitalization of payments has a positive relation with GDP, leading to increased economic growth.

Data types and sources

Data are the raw materials that transform into knowledge in the world of research. Consider it as proof of a hypothesis. Data takes the place of setting the stage for objective analysis of a research study or it is just a fancy name for an opinion piece. It gives credit and repeatability that is needed for scientific advancement. Through a systematic quest for information, researchers can discover meaningful patterns and trends and identify patterns that are not obvious to them, avoid the influence of personal bias, measure an issue in a consistent way, and derive conclusions based on the evidence and be open to peer review. Data are usually categorized differently. Quantitative data are numerical and measurable and are analyzed using statistics to answer the question of "how many" or "how much?" Qualitative data are descriptive and conceptual. It is concerned with the "why" and "how" of human experience. Data are also categorized into Primary and Secondary.

Primary Data

Primary information is vital to most of the things we do today. Whether in business, healthcare, science or government, there is no doubt that firsthand data is a critical part of our journey to progress and make informed decisions. In collecting data, it is better to assure the valid sources of data. Reliable data sources aid in conducting robust and impactful research. For this research careful selection of primary sources is done. Also, a detailed questionnaire is drafted for specific information on the subject. The use of primary data was vital for the paper as it gave original and unbiased information. From various primary sources like in person interviews, telephonic interviews, surveys, etc. questionnaire method was used as it was the most suitable considering the respondents, time frame and the cost aspects.

Secondary Data

Secondary data are data that have been previously gathered, analyzed, and documented for another research study or other research purposes. In contrast to gathering raw information from scratch, the researcher is a "secondary" user, re-analyzing existing data to gain a new understanding or work out a new hypothesis. Secondary data is usually divided into two types according to its source. Data from within the researcher's own organization, or from a government agency that reports to the researcher's organization like sales reports, logs of customer feedback, financial statements, and previous internal studies are said to be from internal sources.

Data that are gathered by external sources like Government censuses, trade association reports, and commercial databases are examples of external sources. The sources used for this research are government records, public literature, digital Footprints and market research reports.

Population

It refers to the maximum number of people possessing knowledge about the digitalisation of payments and GDP.

Sampling Frame

The sampling technique used was random sampling, by which different groups of people, belonging to various professions and age groups, were selected.

Sample Size

A sample size of respondents was selected for the meaningful study.

Study Area

Mumbai, being a metropolitan city and the financial capital of India, is expected to have thorough knowledge about the technological advancements in healthcare, considering that the study was restricted to the city of Mumbai only.

Limitations

During the research study, I faced following limitations

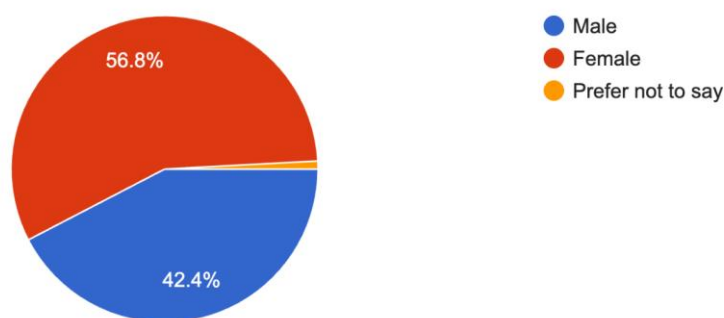
- i. For secondary data, I could not access to certain commercial reports due to their unavailability.
- ii. Primary data collection was limited to a smaller localized sample.
- iii. For secondary data, there was no control over how the data was gathered or the questions asked.
- iv. Respondents might give "politically correct" answers rather than the truth to avoid looking bad was unavoidable.
- v. For secondary data, risk of hidden biases or errors in the original collector's methodology might have affected the quality of data.
- vi. Respondents bias based on the set perception might have affected the quality of data.

DATA ANALYSIS AND PRESENTATION

118 people were surveyed through a questionnaire to collect meaningful and adequate data.

What is your gender?

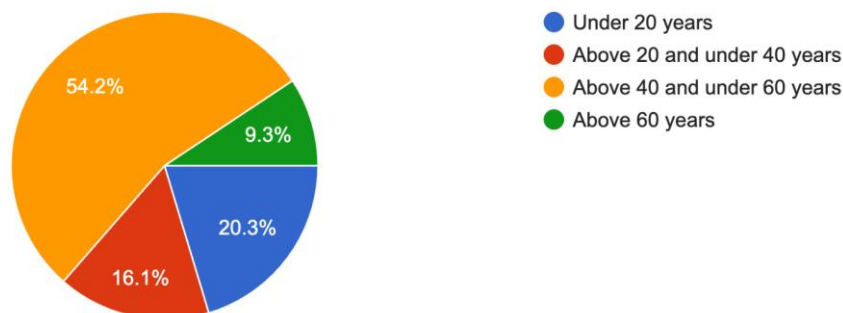
118 responses



From the chart above, we can see that the people who filled this form were predominantly female.

What is your age?

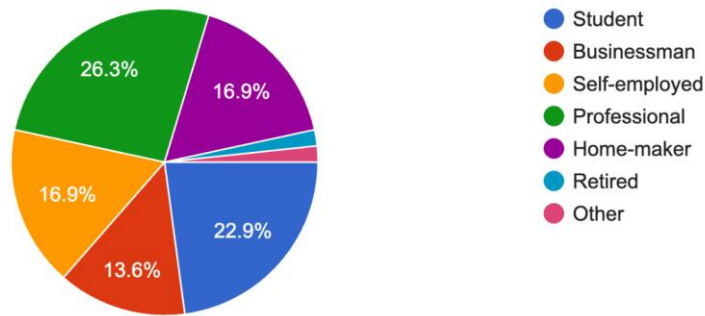
118 responses



Respondents who filled in this form were between the ages of 40 and 60.

What is your profession?

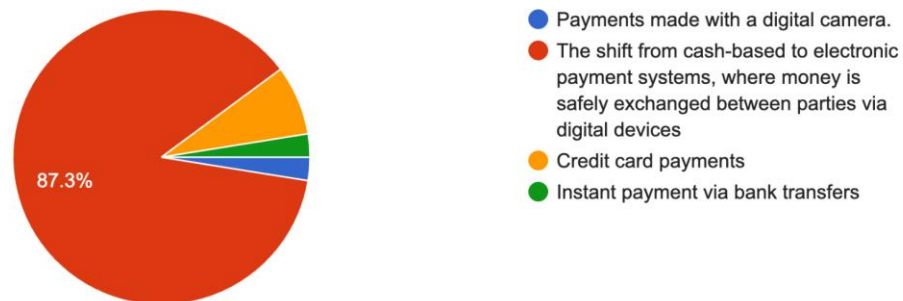
118 responses



From the above pie chart, it is clear that respondents were all from different professions.

What is the digitalization of payments?

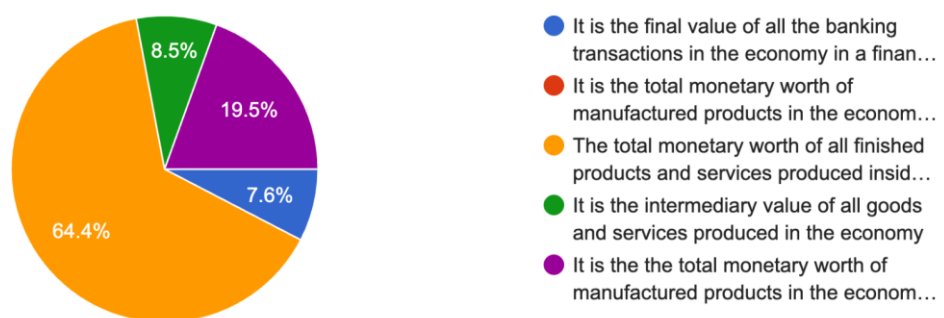
118 responses



It can be inferred that most respondents correctly identified digitalization of payments as the shift from cash-based transactions to electronic payment systems using digital devices.

From the following, what defines Gross Domestic Product (GDP)?

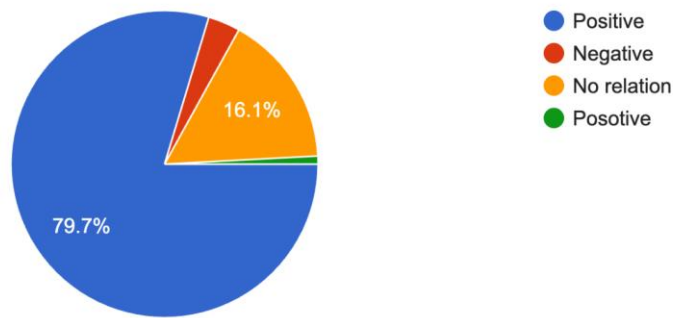
118 responses



We can see that most respondents correctly identified GDP as the total monetary worth of all finished goods and services produced within a country, while others lacked clarity.

What is the relationship between the adoption of digital payments and GDP growth?

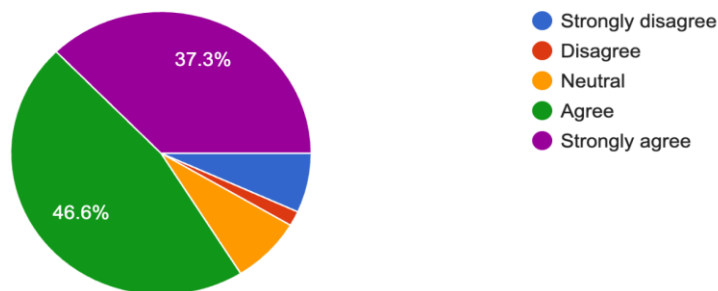
118 responses



As shown in the graph above, most respondents believe there is a positive relationship between the adoption of digital payments and GDP growth.

In the midst of the worldwide development of formal financial services, the COVID-19 epidemic has accelerated financial inclusion, leading to a significant rise in digital payments.

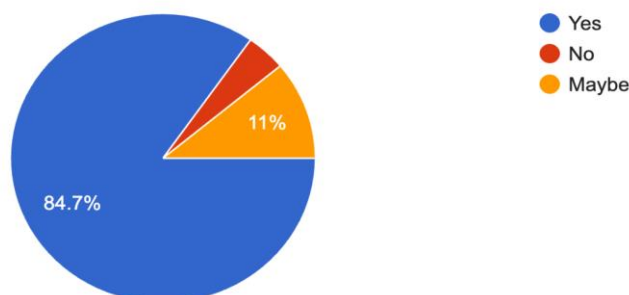
118 responses



The pie chart above highlights that most respondents agreed that the COVID-19 pandemic accelerated financial inclusion and led to a significant rise in digital payments.

As payment systems are becoming more digital, they are changing the norms of global finance.

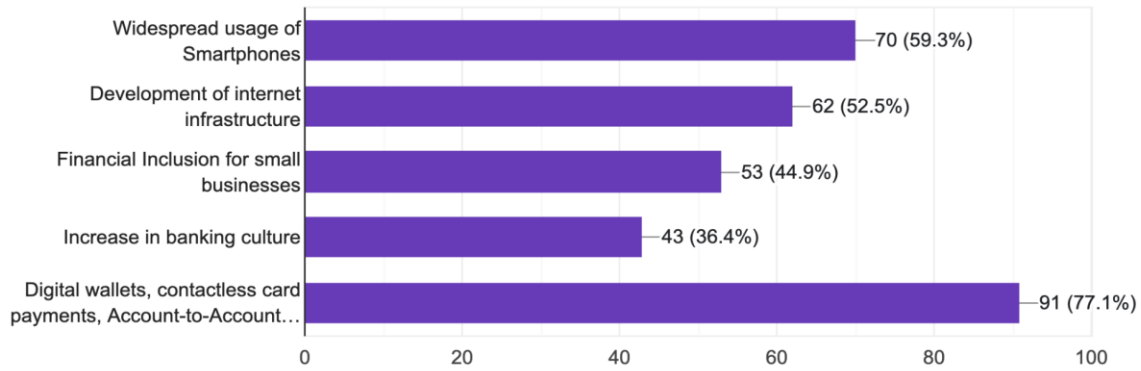
118 responses



It is clear from the pie graph above that most respondents believe that as payment systems become more digital, they are changing the norms of global finance.

What are the key growth drivers of digitalization across the globe?

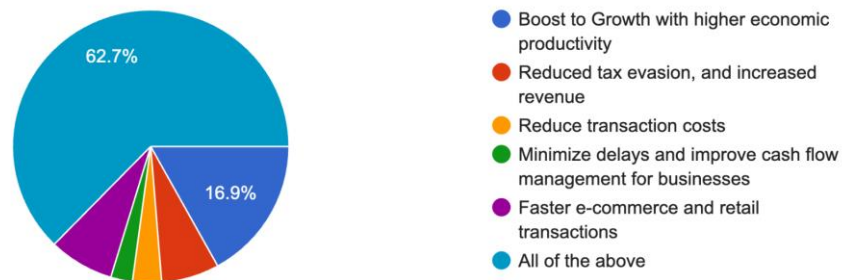
118 responses



We can see that almost all respondents identified digital wallets, contactless card payments, and account-to-account transfers as the key drivers of digitalization across the globe, with the widespread usage of smartphones, as well.

What is the Impact of Digital Payments on the world economy?

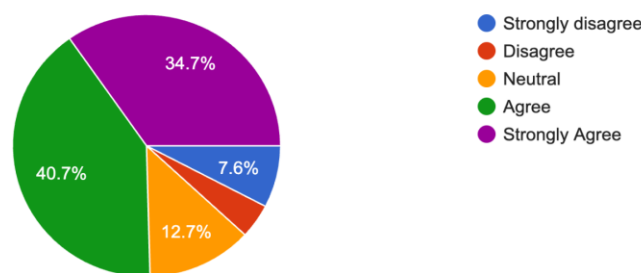
118 responses



As shown in the graph above, most respondents believe that digital payments have multiple positive impacts on the global economy.

Effective legislation and regulation are required to guarantee a stable and just financial system as digitization continues to affect the future of money and the exchange of value.

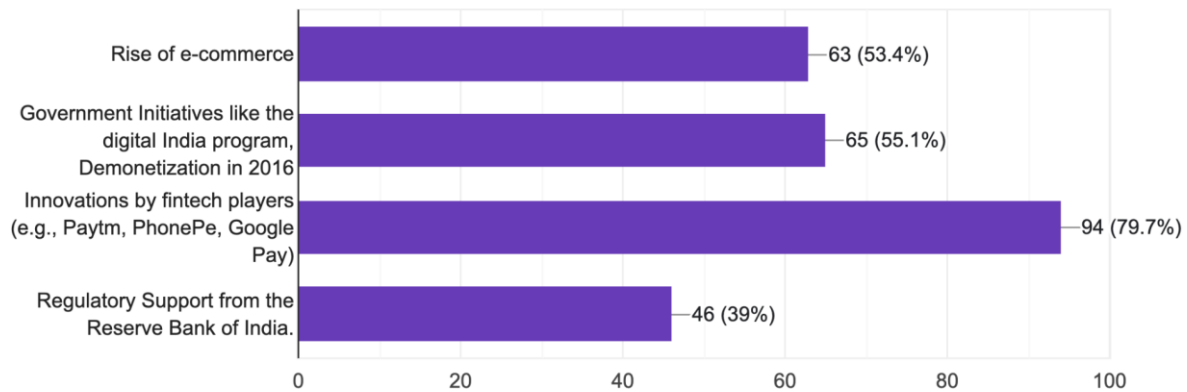
118 responses



Indicated by the pie chart above, most respondents agreed that effective legislation and regulation are necessary to ensure a stable and fair financial system as digitalization continues to shape the future of money.

What has led to the growth of digitalization of payment in India?

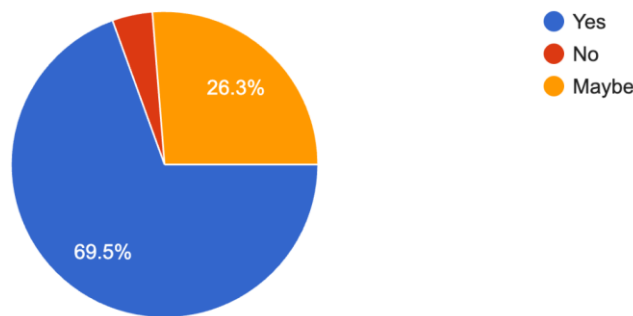
118 responses



As suggested by the graph above, most respondents believe innovations by fintech companies have been the main driver behind the growth of digital payments in India.

By 2030, India's digital economy is projected to contribute nearly one-fifth of the country's overall economy, outpacing the growth of traditional sectors. Do you think it is possible?

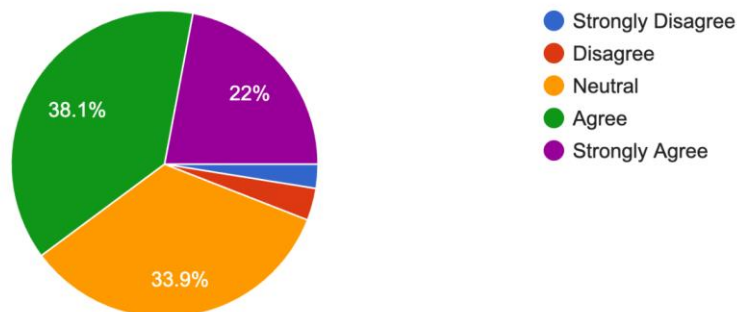
118 responses



As reflected by the graph above, most respondents believe India's digital economy can contribute nearly one-fifth of the country's overall economy by 2030.

The digital economy is a key driver of both global economic growth and employment

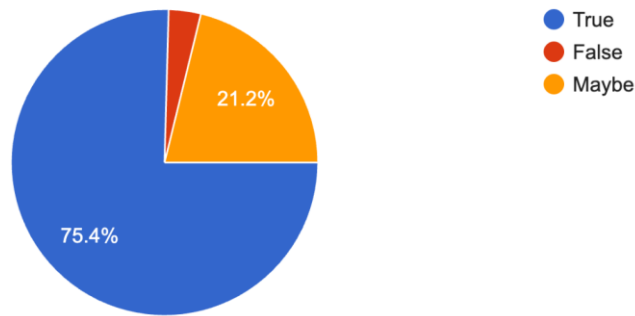
118 responses



We can infer that majority of the respondents agree that the digital economy is a key driver of global economic growth and employment while still 33% of them are neutral, yet to form an opinion.

The way forward involves robust, interoperable infrastructure, enhanced AI-driven security, and a commitment to ensuring that digital financial ser...p between banked and unbanked world populations.

118 responses



The pie chart above makes it evident that most respondents believe that building strong digital infrastructure, improving AI-driven security, and expanding access to financial services are essential for the future of digital finance.

CONCLUSION

In summary, digitalization and digital payment methods have emerged as key sources of economic growth, financial inclusion, productivity, and modernization worldwide. The increased adoption of digital technologies in terms of online banking, mobile banking, UPI systems, e-commerce, artificial intelligence, and digital infrastructure has revolutionized how individuals, corporations, and governments conduct themselves. Digital payments have numerous benefits compared to cash payments in that they can be processed quickly, are more convenient, are transparent, cost-efficient, easy for keeping financial records, and make online banking and other transactions accessible. Despite the fact that cash payments are still relevant in poorly connected and less technologically aware communities, the international trend towards a cashless and connected economy continues to grow.

India has made significant progress in the digital sphere through its projects like Digital India, Aadhar, Bharat Net, and Unified Payment Interface (UPI), thus enabling the development of India's digital economy. Digitalization is taking place with growing access to the Internet, increased adoption of smartphones, and rural connectivity. India is one of the biggest countries in terms of real-time payments, with almost half of real-time payments around the globe originating in India. Digitalization has played an important role in financial inclusion, especially for unbanked people.

Moreover, digitization is changing labour market dynamics and providing new job openings in fields like artificial intelligence, financial technology, digital marketing, e-commerce, biotechnology, healthcare technology, and data analytics. Higher productivity and innovation are fostering economic growth and making investment more attractive. The government, global bodies, and private sector firms still have an important part to play in enhancing digital infrastructure, cybersecurity mechanisms, and digital literacy initiatives to foster secure digital growth.

Despite all of the above, some obstacles like cyber-attacks, fraud in online platforms, unequal internet access, digital illiteracy, among others, must be overcome. It is vital to close the digital gap between urban and rural areas so as to ensure that the advantages associated with digitalization can benefit everyone. In spite of the above mentioned obstacles, the digitalization of the world economy is inevitable and it will soon be essential for the functioning of any payment system or digital service. In general, digitalization plays an important role in the process of economic growth, job creation, innovation, and sustainable development.

REFERENCES

- [1] <https://www.sciencedirect.com/science/article/pii/S0275531925000248>
- [2] https://www.researchgate.net/publication/336835369_An_Overview_On_Digital_Payments
- [3] https://www.researchgate.net/publication/393041563_The_Future_of_Contactless_Payments_A_Comparative_Study_of_Adoption_Trends_in_Emerging_Vs_Developed_Markets
- [4] <https://gscen.shikshamandal.org/wp-content/uploads/2024/07/11.pdf>
- [5] https://www.researchgate.net/publication/392864843_Internet_of_Things_IoT_and_Future_of_Digital_Payments_Enabling_Smart_Automated_Transactions
- [6] https://www.researchgate.net/publication/386283899_Risks_of_Using_Digital_Payment_Method_Using_the_Perceived_Risk_PR_Theory_Approach
- [7] <https://www.maximusinfoware.in/resources/blogs/world-s-top-10-countries-moving-to-digital-payments>
- [8] <https://www.sciencedirect.com/science/article/pii/S0275531925000248>
- [9] <https://ideas.repec.org/a/eee/riibaf/v75y2025ics0275531925000248.html>
- [10] <https://ajmjournal.com/AbstractView.aspx?PID=2023-14-4-12>
- [11] <https://researchtrendsjournal.com/uploads/articles/3-1-66.1.pdf>
- [12] <https://www.ijcrt.org/papers/IJCRT2005110.pdf>
- [13] https://papers.ssrn.com/sol3/papers.cfm?abstract_id=5357907
- [14] https://www.researchgate.net/publication/361807570_An_Study_of_Research_Methodology
- [15] <https://utimaco.com/service/knowledge-base/digital-payments/what-are-digital-payments>
- [16] <https://www.ibm.com/think/topics/cash-vs-digital-payments>
- [17] <https://economictimes.indiatimes.com/news/economy/finance/digital-payments-comprise-99-8-of-total-transactions-volume-in-h1-2025-upi-transactions-rbi/articleshow/124760861.cms?from=mdr>

- [18] <https://www.pinelabs.com/blog/what-are-rbis-new-upi-rules-in-2026-latest-updates-impacts-benefits>
[19] <https://www.bis.org/review/r250311f.htm>
[20] <https://www.betterthancash.org/news/world-bank-report-digital-payments-vital-to-economic-growth>
[21] <https://economictimes.indiatimes.com/industry/banking/finance/banking/mobile-money-doubles-to-2-trillion-in-4-years-as-digital-payments-surge-globally-report/articleshow/130729838.cms?from=mdr>
[22] <https://www.grandviewresearch.com/industry-analysis/digital-payment-solutions-market>
[23] <https://economictimes.indiatimes.com/industry/banking/finance/banking/mobile-money-doubles-to-2-trillion-in-4-years-as-digital-payments-surge-globally-report/articleshow/130729838.cms>
[24] <https://www.pib.gov.in/PressNoteDetails.aspx?ModuleId=3&NoteId=154788®=3&lang=2>
[25] <https://www.ilo.org/resource/article/digitalization-employment-policies>
[26] <https://www.worldbank.org/en/region/eap/publication/future-jobs>

Appendix

Survey Questionnaire:

- 1) What is your gender?*

 - Male
 - Female
 - Prefer not to say

- 2) What is your age?*

 - Under 20 years
 - Above 20 and under 40 years
 - Above 40 and under 60 years
 - Above 60 years

- 3) What is your profession?*

 - Student
 - Businessman
 - Self-employed
 - Professional
 - Home-maker
 - Retired
 - Other

- 4) What is the digitalization of payments?*

 - Payments made with a digital camera.
 - The shift from cash-based to electronic payment systems, where money is safely exchanged between parties via digital devices
 - Credit card payments
 - Instant payment via bank transfers

- 5) From the following, what defines Gross Domestic Product (GDP)?*

 - It is the final value of all the banking transactions in the economy in a financial year.
 - It is the total monetary worth of manufactured products in the economy in a financial year.
 - The total monetary worth of all finished products and services produced inside a nation's boundaries during a certain time period.
 - It is the intermediary value of all goods and services produced in the economy

- 6) What is the relationship between the adoption of digital payments and GDP growth?*

 - Positive
 - Negative
 - No relation

- 7) In the midst of the worldwide development of formal financial services, the COVID-19 epidemic has accelerated financial inclusion, leading to a significant rise in digital payments.*

 - Strongly disagree
 - Disagree
 - Neutral
 - Agree
 - Strongly agree

- 8) As payment systems are becoming more digital, they are changing the norms of global finance.*

 - Yes
 - No
 - Maybe

- 9) What are the key growth drivers of digitalization across the globe?*

 - Widespread usage of Smartphones
 - Development of the Internet infrastructure
 - Financial Inclusion for Small Businesses
 - Increase in banking culture
 - Digital wallets, contactless card payments, Account-to-Account (A2A) transfers, UPI

- 10) What is the Impact of Digital Payments on the world economy?*

 - Boost to Growth with higher economic productivity
 - Reduced tax evasion and increased revenue

- Reduce transaction costs
 - Minimize delays and improve cash flow management for businesses
 - Faster e-commerce and retail transactions
 - All of the above
- 11) Effective legislation and regulation are required to guarantee a stable and just financial system as digitization continues to affect the future of money and the exchange of value.*
- Strongly disagree
 - Disagree
 - Neutral
 - Agree
 - Strongly Agree
- 12) What has led to the growth of digitalization of payment in India?*
- Rise of e-commerce
 - Government Initiatives like the Digital India program, Demonetization in 2016
 - Innovations by fintech players (e.g., Paytm, PhonePe, Google Pay)
 - Regulatory Support from the Reserve Bank of India.
- 13) By 2030, India's digital economy is projected to contribute nearly one-fifth of the country's overall economy, outpacing the growth of traditional sectors. Do you think it is possible?*
- Yes
 - No
 - Maybe
- 14) The digital economy is a key driver of both global economic growth and employment*
- Strongly Disagree
 - Disagree
 - Neutral
 - Agree
 - Strongly Agree
- 15) The way forward involves robust, interoperable infrastructure, enhanced AI-driven security, and a commitment to ensuring that digital financial services are accessible to all, bridging the gap between banked and unbanked world populations.*
- True
 - False
 - Maybe