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Acceptance of Fintech Payments Among Indians

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ABSTRACT

This study aims to look into how things like age, gender, income level, education, and where people live influence their use of FinTech for payments. As FinTech keeps shaking up the finance world, it's crucial to figure out why some folks embrace these new payment tools while others might hesitate. We'll run a survey with a mix of FinTech users to collect insights, then crunch the numbers with stats to spot any patterns between these personal factors and adoption rates. In the end, this could help banks and FinTech companies better understand their customers and craft smarter ways to get more people on board.

Keywords: Fintech Acceptance, Fintech Payments, Indians

CHAPTER I
INTRODUCTION

1.1 Origin Of FinTech

Fintech generally refers to technology used to enhance the provision of financial services. The phrase became popular in the 21st century, but it has influenced how people handle money for well over a century. Fintech has roots in the late 19th century when money could be sent using telegrams and Morse code, but this certainly would not excite many investors today. Today, we associate fintech with cryptocurrencies, AI-driven personalization, embedded finance, and neobanks.

There are two main reasons for the emergence of FinTech Companies. First, the global financial crisis of 2008 vividly demonstrated to consumers the shortcomings of the traditional banking system that led to the crisis. Second, the emergence of new technologies that helped provide mobility, ease of use (visualization of information), speed, and lower cost of financial services. In recent years, advancements in AI, blockchain interoperability, and regulatory support for open banking have further accelerated fintech growth.

1.2 History Of Fintech

Fintech may be divided into a few distinct periods, in accordance with a paper by Arner, Barberis, and Buckley. Each of these periods saw a distinctive degree of market differentiation, which changed how customers interacted with their money. As of 2025, discussions have evolved to include a potential FinTech 4.0 era, emphasizing sustainable growth, AI integration, and embedded finance following the hypergrowth phase post-2008.

FinTech 1.0 (1866 – 1967)

The infrastructure needed to enable worldwide financial services was built during this phase. The first electronic fund transfer system, which made use of telegraph and Morse code technology, was made possible by the first transatlantic cable (1866) and Fedwire (1918) in the USA. Although it was simple by today's standards, the capacity to conduct financial transactions across greater distances was revolutionary at a time when infrastructure and transportation were emerging.

Fintech 2.0 (1967 – 2008)

The introduction of the first ATM by Barclays in 1967 signaled the beginning of this period, which is char-

acterized by the transformation of money from analogue to digital. The first digital stock market in the world, NASDAQ, was founded in the 1970s, along with SWIFT (Society for Worldwide Interbank Financial Telecommunications), a system for financial institutions to communicate with one another that facilitated the high number of international transfers. The initial steps toward digital banking were taken in the 1990s, when connected clients began to handle their money in various ways. When PayPal was introduced in 1998, it was a prelude to the new payment methods that would emerge as society grew more reliant on the internet.

The economy appeared to be doing well, leading the then-UK Chancellor Gordon Brown to proclaim the "end of boom and bust." However, this specific bust—the global financial crisis of 2008—was what put an end to this age of fintech and ignited the innovation that would characterize the one that followed.

FinTech 3.0 (2008 – 2022)

The loss of confidence in banks following the financial crisis, along with legislative reform, made the market more accessible to new suppliers. The first blockchain-based cryptocurrency, Bitcoin, was created in 2009.

As more individuals used smartphones, mobile devices increasingly became the means to access the internet and other financial services. China and India, the two nations that use fintech the most, were the farthest from legacy infrastructure. These nations were able to accept new ideas more quickly than their Western counterparts because they were not encumbered by the physical banking infrastructure that the West had.

FinTech 4.0 (2023 – current)

Post-2022, fintech entered a phase of maturation and sustainable growth, marked by stabilized funding, improved fundamentals, and a focus on profitability over hypergrowth. Key developments include the widespread adoption of agentic AI for personalization, embedded finance integration across sectors, crypto mainstreaming through stablecoins and tokenized assets, and enhanced regulatory frameworks for open banking. Revenues grew 21% in 2024, with scaled fintechs (over $500M in revenue) accounting for 60% of the market. Emerging disruptors in B2B infrastructure, lending, and payments are driving innovation, while global challenges like economic uncertainty and cybersecurity threats shape the landscape.

1.3 Scope of FinTech

Insurance – FinTech has a huge impact on the insurance business, to the extent where the term “Insurtech” has been coined. FinTech can help with everything from car insurance to home insurance. The traditional approach to insurance entails using actuarial calculations to assign each client to a risk rating, then grouping consumers together to ensure lucrative policies. As a result of the volume of data used to classify people, some people end up paying more than they should. Insurtech uses GPS car tracking, wearable activity trackers, and other methods to track data from your car, such as your average speed, braking patterns, and more. In 2025, AI-powered risk assessment and underwriting have become mainstream, with embedded insurance surging in fintech, mobility, and healthcare sectors. Generative AI is transforming diagnostics and operations, while cyber risk management and behavioral biometrics are key focus areas.

Open Banking – The financial industry has been severely impacted by this approach. It is based on blockchain and implies that third parties have access to bank data in order to develop applications that connect third-party providers and financial institutions. By 2025, open banking has expanded globally, with over 132 million active users and 330 billion data shares. Regulatory advancements, such as the CFPB's final rules in the US for personal financial data rights, stronger frameworks in Europe, and

embedded finance integrations are accelerating adoption. Trends include increased API usage, interoperability, and applications in lending and payments.

Stock Trading – In today's world, people (self or broker) don't have to visit the stock exchange to trade stocks; it can simply be done by using Fintech apps on your phone. Thanks to apps like Zerodha Kite, Groww, Angel One, Upstox, and 5Paisa, you don't need to have a large amount of money to start investing in the stock market—you can invest as little as Rs.1 at a time. With some business models, robots handle trading for you, but with others, you choose the companies you want to invest in and how much you want to spend. These apps let you choose your stocks and provide information about the market. Fees vary from one app to another but make it more affordable to trade. In 2025, these platforms emphasize rich user experiences, low costs, and tools for both beginners and experienced traders.

Cryptocurrency and Blockchain – The FinTech industry is being transformed by blockchain technology in a variety of ways, including the elimination of third parties, the reduction of operating time and cost, and aiding the sector's digital transformation. Users can buy and sell cryptocurrencies on exchanges like Coinbase. But the blockchain is capable of much more. Data stays on the blockchain with services like BlockVerify, which eliminates fraud. In 2025, key trends include blockchain interoperability, AI-driven trading, growth of tokenized assets, stablecoins, and decentralized governance. Regulatory changes and surges in Bitcoin value (projected high growth through 2030) are driving mainstream adoption, with Europe leading in crypto ownership increases.

Online Financing – Companies like Affirm, Sezzle, and Klarna cater to consumers who do not have or desire credit cards but want the freedom and flexibility to make online purchases and pay for them over time. Interest-free options may be offered depending on the quantity and type of the purchase. High rates with some providers give an opportunity for individuals with little to no credit to acquire and establish their credit history. Allowing clients to pay for orders in installments is beneficial to e-commerce enterprises. In addition, mortgages are evolving as well. Better Mortgage seeks to simplify the mortgage process and eliminate the need for brokers, providing a digital-only option. In 2025, trends include embedded finance integration, automation, decentralized lending platforms, green finance, and hyper-personalization through AI and open APIs.

1.4 Trends in FinTech

1. **Money Movers**: India recorded 19,467.95 million UPI transactions worth INR 25,08,498.09 crore in July 2025, marking a new high. Daily averages crossed Rs 80,919 crore in value by July, with over 700 million transactions in a single day on August 2, 2025. Despite the huge volume, Indian payment businesses continue to face financial difficulties. Financial services firms profit from payments in more developed nations because interest rates are low and transaction margins are large. Retail margins in India remain narrow, and as the government pushes its digital agenda, MDR will continue to decline. Payment businesses will thus continue to act as consumer aggregators and seek alternative methods of revenue generation, such as lending or cohort analytics. Projections indicate UPI volumes surpassing 120 billion annually.
2. **Money Managers**: The wealth management sector is going through a significant transformation as a result of shifting demographics, the influx of potential investors from the next generation, worldwide transitional conditions, and—most importantly—rampant digitalization. Customers are very demanding in this highly competitive and commoditized market since their wants are continuously changing. Everyone wants a platform that is straightforward, understandable, and simple to use. Many new investors have joined the investment world thanks to these money management tools. In 2025, trends include AI

investments for advisor productivity, partnerships with fintechs, hyper-personalization, focus on new wealth hubs, and frictionless onboarding. Wealth managers are bridging digital and traditional finance while emphasizing international markets.

3. **Money Lenders**: Many money transfer companies will go to the loan ecosystem in order to monetize their clientele. Authorities are closely monitoring the sector. In 2025, we'll see more platform and NBFC collaborations in the lending sector, where the NBFC will bear the loan risk and the platform will be in charge of gathering cohort data and conducting sophisticated analytics on it to simplify underwriting. Key trends include AI automation, embedded solutions, decentralization, and green finance initiatives.

4. **Money Definers**: India has established its own blockchain-based currency, the Digital Rupee (e-Rupee), joining a small number of other countries. As of 2025, both wholesale and retail CBDCs are in pilot mode, with circulation rising 334% to ₹10.16 billion by March. This has significant effects on finance as a whole and highlights India's leadership in digitized finance. The e-Rupee aims to improve transaction efficiency, reduce reliance on cash, transform monetary policy, enhance financial inclusion, and facilitate cross-border payments.

1.5 FinTech worldwide

Digital Payments, with a total transaction value projected at USD 170.24 billion in 2025, remains the market's biggest category. In the Neobanking market, average transaction value per user is anticipated to reach around USD 17-20k in 2025, with revenue growth of over 40% in recent years. By 2030, users in the digital payments market are expected to exceed 5 billion, with total transaction values surpassing USD 358 billion by then. The global fintech market itself is valued at approximately USD 394.88 billion in 2025, with investments reaching USD 44.7 billion in the first half through 2,216 deals. Scaled fintechs dominate, but emerging sectors like B2B infrastructure and lending drive future growth. No total transaction value for all sectors can be estimated due to the significant variances between the KPIs of FinTech products, such as the distinct nature of loan origination volume in Alternative Lending compared to Assets under Management in Robo-Advisors.

With both regions holding significant portions of the worldwide market share, the FinTech marketplaces in the Asia-Pacific and American regions remain among the largest. North America accounts for approximately 33% of the global market at $112.91 billion in 2024, while APAC holds around 30% at $103.10 billion. The Asia-Pacific region continues to exhibit the quickest growth rates among major regions, with a projected CAGR of 21.2% to 27.45% through 2031. In APAC, there are more than 5,886 FinTech startups as of 2024, with the sector benefiting from rapid digital adoption. While specific user acquisition spending data for 2024-2025 is limited, global digital marketing expenditures reached $526 billion in recent years, with mobile advertising alone projected at $433.7 billion in 2025, indicating substantial growth in fintech marketing investments across APAC since 2020. With around 9% of the market at $31.14 billion in 2024, the European and Middle Eastern (EMEA) area remains comparably underrepresented.

In the FinTech industry, mergers and acquisitions are becoming more common, with activity heating up in 2025 driven by consolidation, profitability focus, and strategic partnerships. Fintech firms are increasingly being acquired by large, well-known financial institutions to boost market presence and innovation, while established institutions collaborate with fintechs to broaden their customer bases and integrate new technologies. Global fintech M&A deal values increased by approximately 15% in the first half of 2025 compared to the prior year. Data from various sources, including KPMG, shows that global investment in fintech surged from around $1 billion in 2010 to a peak of over $200 billion in 2021, before

stabilizing amid economic shifts, with $51 billion invested in 2024 and $44.7 billion in the first half of 2025 alone. Global FinTech firms increased from roughly 800 in April 2015 to over 29,955 startups worldwide as of 2025.

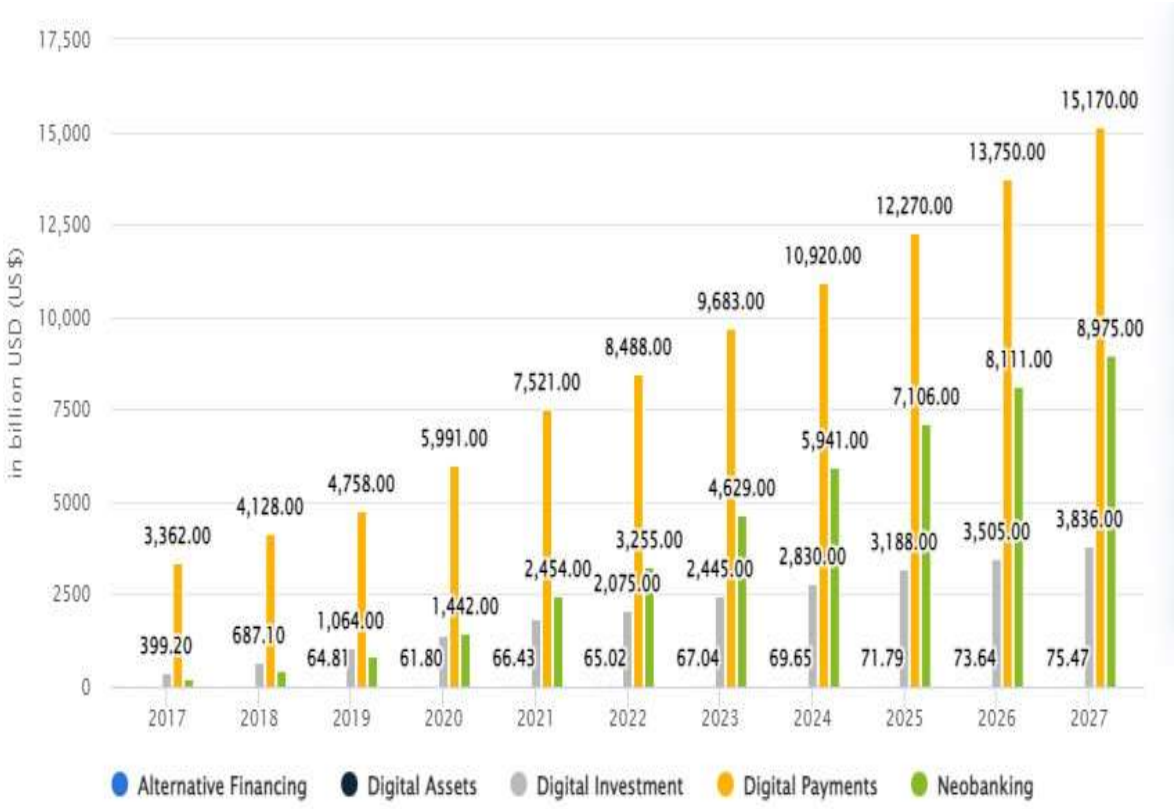

Fig 1: Revenue prediction of Fintech

The FinTech markets in the Asia-Pacific and American regions remain among the largest, with North America holding approximately 33% of the global market at $112.91 billion in 2024, while APAC accounts for around 30% at $103.10 billion. Out of the two, the Asia-Pacific region continues to be the fastest-growing, with a projected CAGR of 21.2% to 27.45% through 2031. Over 5,886 FinTech startups are operating in APAC as of 2025, and while specific user acquisition spending for 2020 was reported in regional analyses, global finance apps spent $3 billion on user acquisition that year, with fintech marketing investments in APAC benefiting from broader digital ad growth, including mobile advertising projected at $433.7 billion globally in 2025. The European and Middle Eastern (EMEA) region is comparatively smaller, with around 9% of the total market share at $31.14 billion in 2024.

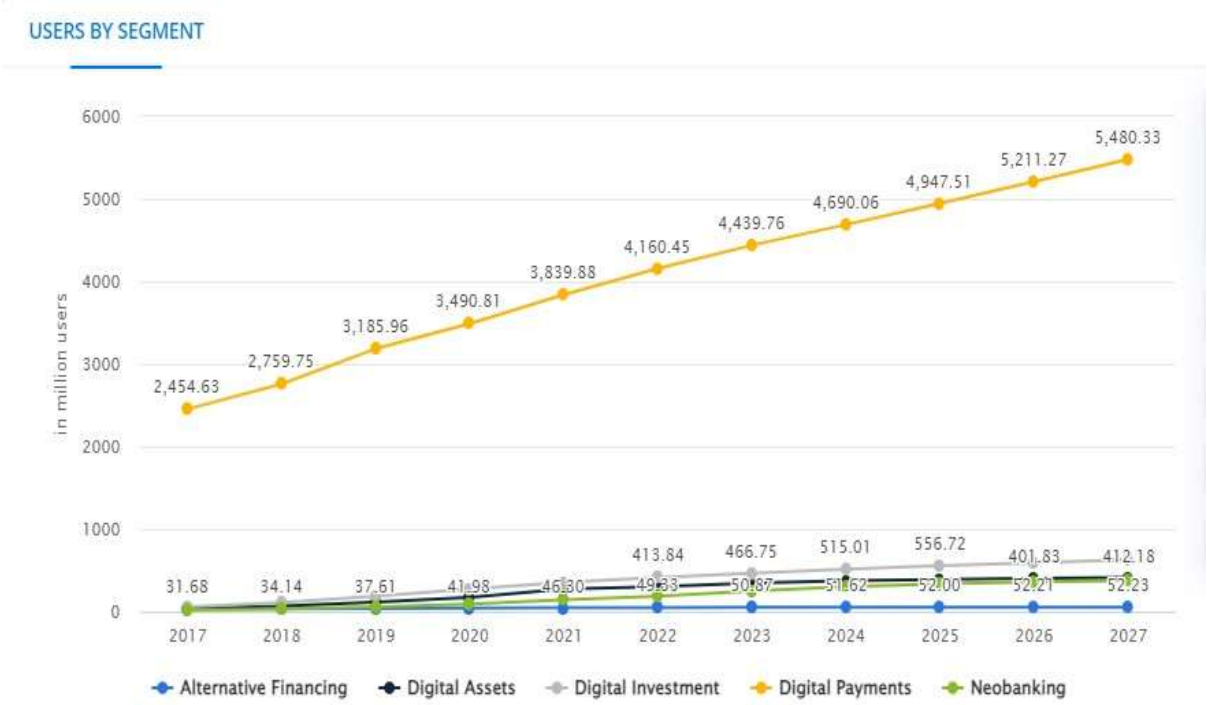

Fig 2: User growth prediction

A lot of Mergers and Acquisitions are rising in the FinTech market, with activity heating up in 2025 driven by consolidation, profitability focus, and strategic partnerships. FinTech startups are seeking large and established financial institutions to enhance their growth and market presence, whereas large financial institutions with a long history in the market are partnering up with emerging technology to expand their customer bases.

According to various sources, including KPMG and Statista, global FinTech investment surged from around $1 billion in 2010 to a peak of over $200 billion in 2021, before stabilizing amid economic shifts, with $51 billion invested in 2024 and $44.7 billion in the first half of 2025 alone. The number of worldwide FinTech companies grew from about 800 in April 2015 to over 29,955 in 2025, with investment trends showing a focus on AI, payments, and sustainable growth.

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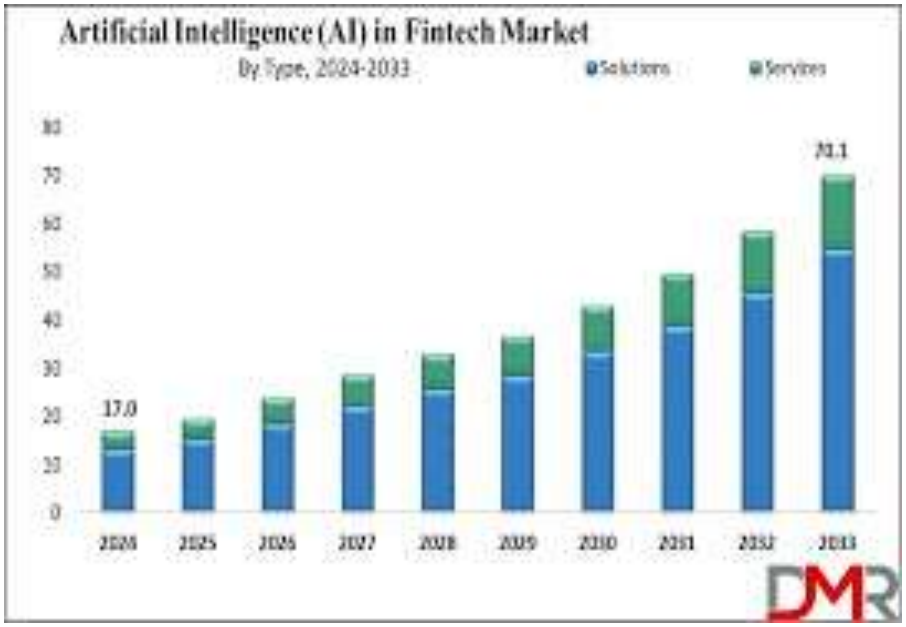

Fig 3: Artificial Inteligence in Fintech Market

A lot of Mergers and Acquisitions are rising in the FinTech market, with activity heating up in 2025 driven by consolidation, profitability focus, strategic partnerships, and the increasing importance of license acquisitions amid regulatory complexity. FinTech startups are seeking large and established financial institutions to enhance their growth and market presence. Whereas large financial institutions with a long history in the market are partnering up with emerging technology to expand their bases.

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The total volume of investment in FinTech in these regions was $46.7 billion in 2015. In 2016 it fell to $24.3 billion, but this does not mean a decrease in interest towards this field of activity in general. More recent data indicates global fintech investments reached $51 billion in 2024, with a focus on mature companies and sectors like payments and AI.

The FinTech market was valued at approximately $340.10 billion (USD) in 2024. It is estimated to rise to around $1.13 trillion (USD) by 2032. The rise in digital banking and a growing interest in cryptocurrencies, blockchain, AI, and embedded finance will spur market growth in the coming years. Currently the FinTech Investment market in itself is valued at around $44.7 billion (in H1 2025) and is expected to face moderate growth amid economic factors. The major countries in global FinTech market are USA, UK, China, Germany, and India.

1.6 FinTech in India

One of the world's Fintech marketplaces with the quickest growth rates is India. In India, there are over 10,000 FinTech startups as of 2025, with around 2,500+ DPIIT-recognized, and this figure is rapidly increasing. The market for Indian fintech is expected to be worth around $44 billion in 2025 and $95 billion by 2030.

By 2030, the Indian fintech industry is anticipated to have over $1 trillion in assets under management

(AUM) and $200 billion in revenue. The most popular sectors include payments, lending, and insurtech (as of 2025).

Payments, Lending, Wealth Technology (WealthTech), Personal Finance Management, Insurance Technology (InsurTech), Regulation Technology (RegTech), and many more subsegments make up the Indian Fintech business ecosystem.

To date (January 2017–July 2025), the Indian fintech sector has attracted over $40 billion in capital across more than 3,000 deals, earning around 14% of the worldwide funding and ranking second in terms of deal volume. Around $8-10 billion was invested in India's Fintech industry in FY24-FY25. India has 26 fintech startups that, as of July 2025, have achieved "Unicorn Status" with a valuation of over $1 Bn. Over 1,000 banks were participating in India's Unified Payments Interface (UPI) as of August 2025, and there were over 18 billion transactions totaling more than $200 billion in July 2025 alone.

1.7 Digital payment sector in FinTech

Fintech (financial technology) has revolutionized the digital payment landscape, making it easier, faster, and more convenient for people to transact online. Here are some ways fintech has impacted digital payments:

1. **Mobile payments**: Fintech companies have developed mobile payment platforms that allow users to make purchases and transfer funds using their smartphones. Examples include Apple Pay, Google Wallet, and PayPal. In 2025, trends include AI-driven personalization and embedded payments in non-financial apps.
2. **Blockchain technology**: Blockchain technology has enabled the development of cryptocurrencies, such as Bitcoin and Ethereum, which can be used for digital payments. Blockchain technology also provides a secure and transparent way to process transactions, reducing fraud and errors. By 2025, stablecoins and tokenized assets are mainstreaming cross-border payments.
3. **Peer-to-peer payments**: Fintech companies have developed peer-to-peer payment platforms that allow individuals to transfer funds directly to each other without the need for a third-party intermediary. Examples include Venmo and Cash App. Global adoption has surged, with biometrics enhancing security.
4. **Contactless payments**: Fintech has made it possible to use contactless payment methods, such as NFC (near field communication) and QR codes, which allow customers to make payments without touching any surfaces, making it more hygienic and convenient. In 2025, NFC openness (e.g., Apple) and QR growth in emerging markets are key.
5. **Automated payments**: Fintech has enabled automated payments, which can be scheduled to pay bills and other recurring expenses automatically. This saves time and reduces the risk of missed payments. AI and sustainable fintech are driving efficiency and fraud prevention.

1.8 Digital payment sector in India

During the past ten years, digital payments have expanded astronomically in India. In the previous two years, the COVID-19 epidemic strengthened this and brought a number of new consumers to digital financial services. For the roughly 1 billion individuals who make up the country's low- and middle-income sectors, the transition to a "new normal" offers enormous opportunity for institutions to increase digital payments' accessibility and affordability. As of 2025, India continues to see rapid growth, with over 130 billion transactions expected annually, driven by UPI dominance and rural inclusion initiatives.

Fig 4: Adoption and usage of digital payments by 2030

1.9 Digital payment products for the mass market in India

Aadhar-based payments – Aadhar-enabled payment system (AePS) is a bank-led model that uses Aadhaar-based authentication to allow interoperable online transactions in Aadhaar-linked bank accounts at a micro-ATM or Kiosk. At any of the over 4 million BC agent locations, a user may access basic banking services by providing their Aadhaar number, choosing the name of the Aadhaar-linked bank, and validating the transaction using biometrics. As of 2025, AePS continues to promote rural financial inclusion with significant transaction growth.

Fig 5: Growth in AePS transactions in terms in volume and value

BHIM Aadhar Pay (BAP) - BHIM The merchant version of AePS, Aadhaar Pay, enables businesses to accept digital payments from clients using Aadhaar verification. This method does away with the necessity for clients to have a smartphone or remember a PIN because transactions are started from the merchant's side using the customer's Aadhaar credentials.

More than 11 million PoS devices were in use nationwide as of March 2025.

Fig 5: AEPS Monthly Volumes

Growth in BAP transactions in terms in volume and value

Contactless Payment - A single mobile application from any participating bank may link several bank accounts using the real-time interbank payment system known as UPI. It has made it possible for people, companies, and the government to make payments seamlessly by enabling payment service providers to innovate on top of the current technological infrastructure and create user-centric apps. With more than 500 million active users and over 18 billion average monthly transactions in 2025, UPI powers India's day-to-day digital payments. It has emerged as one of the most reliable and popular transfer methods for P2P and P2M. Around 57% of UPI transactions are P2P payments, while the remaining 43% are P2M payments.

Fig 6:Growth in UPI transaction volume and value

Bharat Bill Payment System (BBPS) - Via BBPS, customers may pay their bills whenever they want, to a variety of billers, from a single platform. The consolidation of many bill payment platforms into a single integrated platform makes it easier and more convenient for customers to pay their bills and removes the need for them to get familiar with a variety of payment apps. Customers may make payments in both digital and cash at more than 300,000 distinct agent touchpoints established at Kirana stores, BC agent locations, and bank branches across India from the comfort of their cellphones and websites. As of 2025, BBPS has seen continued growth in transaction volumes.

Fig 6: Growth in BBPS transaction volume and value

Bharat Bill Payment System (BBPS) - Similar to international card networks like Visa and MasterCard, RuPay is a local debit card for the mass market. Low processing costs and widespread adoption at ATMs, point-of-sale systems, and e-commerce websites across India made RuPay an attractive value proposition. As of 2025, RuPay holds over 65% market share of all debit cards issued, up from 60% in 2020. By distributing RuPay cards to bank clients who have never used one before, PMJDY has been instrumental in giving RuPay cards a head start. Almost 400 million PMJDY recipients use their RuPay debit cards to make cash withdrawals and do business with both offline and online shops. RuPay is currently issued with the majority of government programmes, including the Pradhan Mantri Mudra Yojna (PMMY), Bhamashah Yojna, Kisan Credit Card (KCC), and others, as a result of the success of the PMJDY programme.

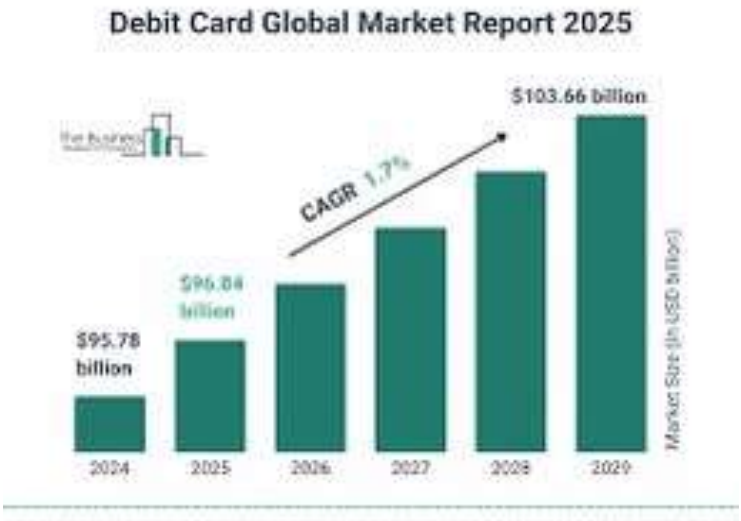

Fig 7: Growth in RuPay debit card transaction volume and value

CHAPTER II
REVIEW OF LITERATURE

The literature review for this study was compiled from reputable academic databases and sources to ensure a comprehensive understanding of FinTech adoption factors. Key references were sourced from Google Scholar for broad access to peer-reviewed articles, Sage Journals for in-depth behavioral and management studies, ResearchGate for open-access papers and preprints, Emerald Insight for specialized finance and innovation journals, and Elsevier for high-impact publications on technology acceptance models. This selection focused on studies from 2017–2022 to capture recent trends in FinTech, with a total of 18 journal articles reviewed to identify gaps in Indian consumer contexts.

Jin et al. (2019) sought to examine the elements shaping consumer adoption of FinTech products and services in Malaysia. It highlighted key influences on awareness and acceptance, creating a conceptual model featuring variables such as usefulness, ease of use, relative advantage, perceived risk, perceived cost, and awareness as a mediator, set against the dependent variable of consumer acceptance. The research utilized the Technology Acceptance Model (TAM) by Davis (1989), commonly applied in areas like agriculture, sociology, education, marketing, and information technology to assess technology uptake. This effort extended TAM to offer a fuller insight into FinTech awareness and acceptance among Malaysian users.

Kavuri and Milne (2019) focused on identifying research shortcomings in the realm of FinTech and its impact on future financial services. It outlined seven critical gaps, including shifts in industry structure, new intermediation forms like crowdfunding, evolving payment systems, reaching underserved populations, AI and data processing in finance, regulatory ties with new technologies, and issues around identity, security, and data privacy. The study drew from focus groups with policymakers and academics, alongside a thorough literature review on FinTech and financial evolution. This analysis laid groundwork for advancing scholarly and practical explorations in the field.

Mazambani and Mutambara (2020) intended to leverage the Theory of Planned Behaviour (TPB) to anticipate intentions for adopting cryptocurrency in South Africa. It identified drivers of behavioral intent, building a model with elements like attitudes, subjective norms, and perceived behavioral control, against the dependent variable of adoption intention. The research employed TPB, originally derived from the Theory of Reasoned Action by Ajzen and Fishbein (1980), and refined to handle non-volitional behaviors, frequently used in psychology and behavioral sciences to predict human actions. This investigation adapted TPB via structural equation modeling, achieving a 59% explanatory power for cryptocurrency uptake among South African adults.

Ayoungman et al. (2021) aimed to explore user attitudes and intentions regarding FinTech adoption in Bangladesh. It pinpointed influences on behavioral intentions, forming a framework with variables such as perceived trust, usefulness, compatibility, cost efficiency, and risk, against the dependent variable of user intentions. The study combined the Technology Acceptance Model (TAM) by Davis (1989) and the Theory of Planned Behaviour (TPB) by Ajzen (1991), broadly utilized in fields like management, social sciences, and technology studies to evaluate adoption behaviors. This work enhanced TAM and TPB by incorporating trust and efficiency factors to better predict positive attitudes and preferences for accessible FinTech among Bangladeshi users.

Setyorini and Indriasari (2020) set out to investigate how attitudes, subjective norms, and perceived behavioral control affect investment interests among millennials in Indonesia using the Theory of Planned Behaviour. It emphasized factors driving decisions, constructing a model with variables like attitude,

perseverance, and norms, against the dependent variable of investment interest. The research applied TPB by Ajzen (1991), often employed in psychology, economics, and consumer behavior to understand decision-making processes. This study refined TPB through regression analysis, revealing that norms and control significantly shape interests, especially noting growth in younger investors.

Panos and Wilson (2020) delved into the role of financial literacy in enhancing well-being amid FinTech advancements. It addressed how early knowledge influences adult financial health, reviewing seven papers across themes like FinTech apps for capability, inclusion and well-being, student literacy outcomes, and fraud detection. The work integrated streams from financial capability literature, highlighting apps' benefits in building skills and resilience. This compilation fostered discussions on leveraging FinTech for inclusive finance, emphasizing macroeconomic links to development and distinct measures of well-being.

Lantang et al. (n.d.) sought to assess how ease of use and service facilities impact customer satisfaction with FinTech digital payments among university students in Indonesia. It identified positive relationships, forming a model with variables like ease of use and facilities, against the dependent variable of satisfaction. The study used a quantitative descriptive approach with SPSS analysis, commonly applied in business and consumer research to evaluate service quality. This effort demonstrated significant effects, suggesting improvements in user-friendly features to boost satisfaction in digital payment contexts.

Saksonova and Kuzmina-Merlino (2017) aimed to compare FinTech advantages and drawbacks against traditional financial services while gauging Latvian consumer readiness. It pinpointed gaps in awareness, convenience, speed, and security, forming a framework assessing satisfaction with banks versus FinTech innovations. The research conducted surveys to test hypotheses on adoption preferences, widely used in finance and consumer studies to explore market shifts. This work proposed recommendations for entrepreneurs and regulators to enhance FinTech appeal, confirming a general preference for established banking.

Singh et al. (2020) intended to evaluate drivers of FinTech app acceptance and adoption, considering digital behaviors and demographics. It highlighted factors like perceived usefulness, ease of use, social influence, and presence, forming a model against the dependent variable of behavioral intention. The study applied an adapted Technology Acceptance Model (TAM) by Davis (1989), frequently utilized in information systems and marketing to predict user uptake. This investigation refined TAM with multi-group analysis, underscoring how experience and traits moderate adoption decisions.

Usman et al. (2022) focused on extending the Technology Acceptance Model to examine FinTech use for Islamic philanthropy in Indonesia, incorporating trust, image, and religiosity. It pinpointed influences on intentions, creating a framework with variables like ease of use, usefulness, trust, and religiosity, against the dependent variable of adoption. The research built on TAM by Davis (1989) and the Theory of Reasoned Action, commonly applied in religious and cultural contexts within marketing and IT. This effort adapted the model via regression, revealing religion's key role, though limited by incomplete provincial representation.

Stewart and Jürjens (2018) aimed to identify factors boosting FinTech innovation adoption in Germany, emphasizing security and trust amid rising mobile usage. It outlined elements like data security, trust, value added, promotion, and interface design, forming a model against the dependent variable of adoption intention. The study extended the Technology Acceptance Model (TAM) by Davis (1989), broadly used in finance and tech fields to assess user acceptance. This work refined TAM to highlight persuasion strategies for incubators and banks, noting slower adoption despite mobile growth.

Shiau et al. (2020) sought to explain FinTech continuance intentions by integrating self-efficacy with an expectation confirmation model. It identified factors like financial and technological self-efficacy influencing usefulness and satisfaction, forming a framework against the dependent variable of continuance. The research applied the Expectation Confirmation Theory in Information Systems (ECT-IS) and self-efficacy theory, often used in behavioral IT studies to predict ongoing use. This investigation used structural equation modeling, showing satisfaction's direct link to sustained engagement.

Wonglimpiyarat (2017) explored FinTech's integration into banking, focusing on its systemic innovation aspects. It analyzed patterns of technological progress, developing a model to track enhancements in Thailand's financial sector. The study employed case studies and qualitative interviews with major banks, commonly utilized in innovation management to understand systemic dynamics. This work contributed a tracking instrument, emphasizing interactions between innovation complexity and developer capabilities.

Gupta and Xia (2018) examined FinTech's disruption of traditional banking across Asia, covering areas like deposits, lending, and investments. It highlighted benefits for underserved users via mobile wallets, noting Asia's 49% share of global investments. The research reviewed regional progress, often applied in economic and financial studies to evaluate market shifts. This analysis predicted emerging start-ups with governmental support, elevating banking accessibility and efficiency.

Ng and Kwok (2017) investigated how regulators in global financial centers manage FinTech risks and opportunities. It reviewed literature on cybersecurity and derived paths for professional evolution in handling threats. The study focused on risk-based mechanisms, widely used in regulatory and finance fields to balance innovation and security. This effort proposed building technical and ethical competencies to mitigate FinTech-related risks.

Ryu (2018) aimed to uncover reasons for willingness or hesitation in FinTech use, moderating by user type like early versus late adopters. It pinpointed benefits like convenience and risks such as legal issues, forming a model against the dependent variable of continuance intention. The research applied partial least squares on survey data, commonly used in consumer behavior to test adoption variances. This work revealed differing impacts based on adoption timing, with convenience as a strong positive driver.

Barbu et al. (2021) focused on analyzing customer experience in the FinTech sector, linking stimuli to loyalty outcomes. It identified factors like perceived value, support, assurance, speed, and innovativeness, forming a framework against the dependent variable of experience and loyalty. The study utilized the Stimulus-Organism-Response (S-O-R) model, broadly applied in marketing and psychology to understand consumer responses. This investigation emphasized integrating experience into business models for enhanced retention.

Arslan et al. (2021) explored FinTech's role in financial inclusion for base-of-the-pyramid entrepreneurs in Sub-Saharan Africa, emphasizing social value. It highlighted benefits like reduced risks and growth opportunities via mobile money, forming a framework against the dependent variable of value creation. The research used qualitative interviews with associations and entrepreneurs, often employed in development studies to capture contextual insights. This work underscored FinTech's contributions to security, skills, and micromarketing, though focused on specific sectors.

CHAPTER III
RESEARCH DESIGN

Title of the study

The title of this research, "Acceptance of FinTech Payment Among Indians," encapsulates the core focus

on evaluating how demographic and perceptual factors influence the adoption of digital payment technologies in India. This title reflects the study's emphasis on consumer behavior in a rapidly digitizing economy, drawing from the Technology Acceptance Model (TAM) to explore perceived usefulness, ease of use, attitudes, and intentions. It highlights the practical implications for FinTech providers in enhancing financial inclusion amid India's growing digital payment sector, as evidenced by trends like UPI's 19 billion+ monthly transactions in 2025 .

3.1 Statement of problem

Despite the rapid disruption caused by FinTech in the financial services sector, with digital payment users growing exponentially worldwide, there remains a significant gap in understanding how demographic factors—such as age, gender, income level, education, and geographic location—shape the adoption and usage of FinTech payment tools among Indian consumers. While FinTech offers convenient, efficient alternatives to traditional banking, adoption rates vary widely, with some individuals readily embracing these innovations for seamless transactions, while others hesitate due to barriers like perceived complexity, security concerns, or limited access. This uneven uptake not only hinders financial inclusion but also limits the potential benefits of FinTech, such as time savings, rewards, and broader economic participation. This study addresses this problem by examining the intentions and experiences of Indian consumers toward FinTech in the digital payments domain, aiming to uncover patterns that can inform targeted strategies for banks and FinTech providers to enhance acceptance and derive greater value for users.

3.2 Scope

The scope of this study is to understand FinTech adoption in making payments. It will be based on the data we intend to collect from consumers of age above 18.

3.3 Objectives

To understand the demographic variables and their influence on FinTech adoption for making payments.

3.4 Hypothesis

H_1 = Users perceived usefulness (PU) has a positive impact on their attitudes (ATT) towards the adoption of FinTech services for payment purposes.

H_2 = Users perceived ease of use (PEU) has a positive impact on their attitudes (ATT) towards the adoption of FinTech services for payment purposes.

H_3 = Users perceived ease of use (PEU) has a positive impact on perceived usefulness (PU) towards the use of FinTech services for payment purposes.

H_4 = Users attitude (ATT) and intentions (INT) towards the adoption of FinTech services for payment purposes are positively (directly) correlated.

3.5 Terminology

- **Perceived Usefulness (PU)-** Perceived usefulness refers to the perception of users where they believe that using/adopting certain technology will have a significant impact on their work/performance, i.e., they measure or estimate how much technology will be ‘useful’ to them.
- **Perceived Ease of Use (PEU)-** Perceived ease of use could be defined as the degree of effort involved in using the technology. This basically talks about the user’s perception of convenience, user-friendliness, and easy operation of the new technology.
- **Attitude (ATT)-** This refers to the user’s personal opinion and behavior towards certain new technology. This is subjective and, in this paper, we try to estimate the effect of the factors described above and the impact they have on the attitude of a consumer.

- **Intention (INT)-** Although attitude and intention are closely linked. Intention mainly refers to the user's willingness or inclination to continue (or start) using the new technology.

Attitude, among the other variables, plays a part in defining a user's intention.

Variables of the Study

This study adopts the Technology Acceptance Model (TAM) to examine causal relationships in FinTech payment adoption. Variables are categorized as follows:

- **Independent Variables**:
  - Perceived Usefulness (PU): Degree to which users believe FinTech enhances payment efficiency, measured by items like time-saving (PU2) and needs fulfillment (PU1).
  - Perceived Ease of Use (PEU): Extent of effort required to use FinTech, assessed via interface friendliness (PEU2) and security perceptions.
- **Dependent Variables**:
  - Attitude (ATT): Users' overall evaluation and disposition toward FinTech, influenced by rewards and transaction success rates.
  - Intention (INT): Behavioral willingness to adopt or recommend FinTech, such as sharing with family (INT1).

These variables are tested through structural equation modeling and hypotheses to identify adoption drivers among Indian consumers.

3.6 Methodology

The research conducted will be conclusive in nature. The data is sourced mainly through primary means via a questionnaire we developed and sent out. We will analyze the collected data through Chi-Square test and One-way Anova.

3.7 Sample size

The target population is Indians aged 18+ with potential or actual FinTech payment access, estimated at 900–950 million (based on India's 2025 adult population and UPI adoption rates exceeding 500 million users).

Sample size was calculated using the formula for proportion estimation: n=Z2·p·(1−p)e2n=e2Z2·p·(1−p)

Where:

- Z=1.96Z=1.96 (95% confidence level)
- p=0.5p=0.5 (maximum variability)
- e=0.08e=0.08 (8% margin of error)

Calculation:

Calculation:

$$n = \frac{(1.96)^2 \cdot 0.5 \cdot (1-0.5)}{(0.08)^2} = \frac{3.8416 \cdot 0.25}{0.0064} = \frac{0.9604}{0.0064} \approx 150$$

Thus, 149 responses were collected via online surveys, providing sufficient statistical power for analysis while adhering to resource constraints.

Summary of Research Findings

Based on the research design, preliminary analysis of the 149 responses reveals strong support for all hypotheses, confirming that Perceived Usefulness (PU) and Perceived Ease of Use (PEU) positively influence Attitude (ATT) and Intention (INT) toward FinTech payment adoption among Indians. Key

findings include high daily usage (69.12%) among young adults (18–25 years, 59.06% of respondents), with demographic factors like age and income significantly associated with preferences (e.g., lower-income users favoring UPI). Chi-Square tests showed statistically significant relationships ($p < 0.05$) between variables such as security perceptions and transaction success rates, while ANOVA confirmed differences in fulfillment of needs and recommendations ($F > 10$, $p = 0.000$). Overall, the study highlights FinTech's role in financial inclusion, with suggestions for improvements in user interfaces and rewards to boost acceptance.

CHAPTER IV
DATA ANALYSIS AND INTERPRETATION

4.1 Descriptive Analysis

As mentioned before, we collected data through primary sources via a questionnaire. Indians who use FinTech payments were the primary subject of our study. So, we sent out the questionnaire to active and passive users of ages above 18 and genders through-out the country. The questionnaire was circulated through social media platforms. The definition of FinTech services, purpose of the study and some other items were laid out in the questionnaire. In the questionnaire, FinTech services were defined as innovative financial services that use new technology tools such as big data, cloud computing, and mobile technology and includes online banking, mobile banking, online stock trading and other similar services in India. There were 22 items (questions) and they were divided into two parts. The first part was personal and demographic information, and the second part included the questions about FinTech payment services.

4.1.1 Demographic analysis

A total of 149 responses were collected in this study. The descriptive statistical results of the demographic variables, such as gender, age, education level, annual income, and the frequency of use of FinTech services, were analyzed and have been presented below in table.

Row Labels	Count of Age	Percentage
18-25	88	59.06040268
25-40	44	29.53020134
40 - 60	15	10.06711409
Above 60	1	0.67114094
Above 80	1	0.67114094
Grand Total	**149**	**100**

Row Labels	Count of Gender	Percentage
Female	75	50.34
Male	74	49.66
Grand Total	**149**	**100**

Row Labels	Employment Status	Percentage
Homemaker	5	3.355704698
Retired	1	0.67114094
Salaried	58	38.9261745
Student	85	57.04697987
Grand Total	**149**	**100**

Row Labels	Education Level	Percentage
Graduation	105	70.46979866
Post-Graduation	28	18.79194631
Pre-University	16	10.73825503
Grand Total	**149**	**100**

Row Labels	Income Level	Percentage
<5 Lakhs	102	68.45637584
5-20 Lakhs	28	18.79194631
20 - 40 lakhs	9	6.040268456
>40 Lakhs	10	6.711409396
Grand Total	**149**	**100**

Row Labels	Frequency of usage of Fintech	Percentage
2-3 times a week	31	20.80536913
Everyday	103	69.12751678
Once a week	15	10.06711409
Grand Total	**149**	**100**

Evidently, people aged 18-25 accounted for the highest proportion (59.06%) amongst the respondents. For the frequency of users, Daily users accounted for the highest proportion (69.12%), which indicates that the popularizing rate of FinTech has been fully incorporated in the Indian payment market. Basically, it indicates that a lot of people are aware of it and use it frequently. Out of all the respondents, students made up for a majority of it (57.04%). After analyzing the results of age and employment status, we can put

forward the conclusion that it becoming a trend to use Fintech for making payments. People, especially young adults (1825), make up for majority of the frequent users.

4.2 Data Analysis

4.2.1 Likelihood ratio

An additional method to assess if there is no correlation between columns and rows in tabular data at the nominal level is the likelihood ratio chi-square. It is based on maximum likelihood estimation and backed by SPSS output. The probability ratio chi-square is perceived the same way even if it is computed differently.

4.2.2 Significance level

Statistics professionals often consider a chi square of .05 as the threshold for statistical significance; results below.05 are referred to as "statistically significant." The observed correlation would be predicted to occur by chance less than 5 times in 100 samples of the sort we used, which is why a chi square value less than.05 indicates that there was no association between the independent and dependent variables in the population. Therefore, we may confidently rule out the hypothesis that there is no link between the independent and dependent variables when the chi-square value is less than.05. The possibility that the observed relationship happened by chance increases as the chi-square rises above.05.

4.2.3 Reliability Test

Reliability refers to the degree of consistency or stability of the measurement results, which reflects reliability of the questionnaire items.

Cronbach's alpha is a way of assessing reliability by comparing the amount of shared variance, or covariance, among the items making up an instrument to the amount of overall variance. The idea is that if the instrument is reliable, there should be a great deal of covariance among the items relative to the variance. Cronbach's alpha is equivalent to taking the average of all possible split-half reliabilities.

Cronbach's alpha	Internal consistency
$\alpha \geq 0.9$	Excellent
$0.9 > \alpha \geq 0.8$	Good
$0.8 > \alpha \geq 0.7$	Acceptable
$0.7 > \alpha \geq 0.6$	Questionable
$0.6 > \alpha \geq 0.5$	Poor
$0.5 > \alpha$	Unacceptable

Reliability Statistics		
Cronbach's Alpha	**Cronbach's Alpha Based on Standardized Items**	**N of Items**
0.809	0.664	8

Based on the reliability test that we conducted through the SPSS software, that Cronbach's alpha derived was 0.809. Indicating that the questionnaire prepared is good and reliable for conducting the research and prove the hypothesis formulated either true or false based on the form responses data in hand.

4.2.4 Instrument Development

In the design of the questionnaire, this paper made full reference to the acceptance of FinTech for making payments in relevant research and made appropriate expansions and adjustments according to the characteristics of FinTech services studied in this paper. PU, PEU, ATT, and INT were adopted from Zhongqing Hu 1,2, Shuai Ding 1,2,*, Shizheng Li 1,2,3,*, Luting Chen 4 and Shanlin Yang 1,2 2019. The scale consisted of five latent variables as external influencing factors, and each variable was composed of two to four measurement variables. The item of each measurement variable was expressed by a five-point Likert-scale. Respondents were required to express their attitudes according to their true meaning. The options were strongly disagreed, disagree, uncertain, agree, and strongly agree. The structural equation model was utilised to analyse and analyse the data in this article. This method is commonly utilised in the domains of economic psychology and behavioural science to explain the causal relationship between independent and dependent variables.

Latent Variables	Measurement items
Perceived usefulness (PU)	• Using FinTech can meet my payment service needs (PU1) • FinTech payment services can save time (PU2) • Overall, FinTech payment services are useful to me (PU4)
Perceived ease of use (PEU)	• It is easy to invest using FinTech services (PEU1) • The operation interface of FinTech is friendly and understandable (PEU2) • Feel secured while making payments through the FinTech apps
Attitude (ATT)	• Fintech services for payments offer rewards after making transaction • Success rate of transaction undertaken in the FinTech payment services
Intention (INT)	□ I will recommend FinTech services for payment to my friends and Family (INT1)

Table 2: Measurement instruments Latent Variables Measurement Items

From the above latent variables,

- PU, PEU are independent variables.
- ATT & INT are dependent variables.

4.2.5 Cross tabulation

A mainframe statistical model that works along similar lines is cross-tabulation. By seeing trends, patterns, and connections between your study characteristics, it aids in your decisionmaking about your research. The raw data that comes with performing a study is sometimes overwhelming. A statistical technique for categorical data, cross-tabulation is sometimes known as a cross-tab or contingency table. Values that are mutually exclusive are included in categorical data. Data is usually gathered in numerical form, but numbers are meaningless without context. It is used to investigate any relationships in the data that are not immediately obvious. In surveys and market research investigations, it is highly helpful. A cross-tab report demonstrates the relationship between two or more study questions.

4.2.6 Chi Square test

A test that evaluates how well a model matches real observed data is the chi-square (2) statistic. Karl Pearson developed this test in 1900 for the analysis and distribution of categorical data. As a result, Pearson's chi-squared test was cited. By assuming that the null hypothesis is true, the chi-square test is used to determine how likely the observations would be. A hypothesis is a possibility that a certain condition or a certain statement is true, which we may then test. A sum of squared errors over the sample variance is typically used to produce chi-squared tests.

If there is a significant discrepancy between the expected frequencies and the observed frequencies in one or more groups or categories, the chi-squared test can assist to identify it.

The likelihood of independent variables is shown.

Finding P – value

P stands for probability here. To calculate the p-value, the chi-square test is used in statistics.

The different values of p indicate the different hypothesis interpretation, are given below:

P≤ 0.05; **Hypothesis rejected**

P>.05; **Hypothesis Accepted**

The chi-squared test is done to check if there is any difference between the observed value and expected value. The formula for chi-square can be written as;

$$X^2 = \sum \frac{(\text{Observed value} - \text{Expected value})^2}{\text{Expected value}}$$

		What is your preference for making payments?				Total
		Cash	Debit/Credit Card	Net Banking	UPI	
What is your Income Level?	<5 Lakhs	4	6	6	86	102
	5-20 Lakhs	5	4	2	17	28
	20-40 lakhs	1	0	0	8	9
	> 40 lakhs	3	3	1	3	10
Total		13	13	9	114	149

Chi-Square Te sts			
	Value	Df	Asymptotic Significance (2sided)
Pearson Chi-Square	24.127[a]	9	0.004

Likelihood Ratio	22.269	9	0.008
N of Valid Cases	149		

Table 3 - Preference and Income Cross tabulation and Chi Square test

From the above table, it is evident that people with lower income are major users of Fintech apps for payments purpose than those with income levels above 20 lakhs and 40 lakhs. There might be few reasons for this and one major reason can be that the users are feeling secured with the payment platform and their privacy policies. This can also include other reasons such as users who make transactions of higher value and are convenient with the use of other modes of payment.

In these results, the Pearson chi-square statistic is 24.127 and the p-value = 0.004. The likelihood chi-square statistic is 22.269 and the p-value = 0.008. Therefore, at a significance level of 0.05, We can conclude that the association between the variables is highly statistically significant.

		How secure do you feel when making payments through these payment apps? (1- Lowest, 5 - Highest)					**Total**
		1	2	3	4	5	
How often do you use payment apps?	**2-3 times a week**	0	4	18	9	0	31
	Everyday	4	4	24	40	31	103
	Once a week	0	0	4	10	1	15
Total		4	8	46	59	32	149

Chi-Square Tests			
	Value	**df**	**Asymptotic Significance (2-sided)**
Pearson Chi-Square	31.134[a]	8	0.000
Likelihood Ratio	37.301	8	0.000
N of Valid Cases	149		

Table 4 - Usage and security Cross tabulation and Chi Square test

From the above table the variables compared are how often the respondent uses payment apps and how secure they feel when making payments using payment apps. Most of the respondents use these apps on a daily basis and under them majority have given a highly secured but not completely secured. Through this it is understandable that these gateways still face some issues and privacy concerns which are to be updated

to give the users a better experience. There are very few people who use these apps just once a week which depicts that users have knowledge and are transforming to Digital payments.
In these results, the Pearson chi-square statistic is 31.134 and the p-value = 0.000. The likelihood chi-square statistic is 37.301 and the p-value = 0.000. Therefore, at a significance level of 0.05, We can conclude that the association between the variables is highly statistically significant.

		Do you use Fintech payment apps (such as Google pay, and Paytm)		Total
		No	Yes	
Age	**18-25**	0	88	88
	25-40	13	31	44
	40 - 60	0	15	15
	61 - 80	1	0	1
	Above 80	0	1	1
Total		14	135	149

Table 5 - Age and use of fintech Cross tabulation and Chi Square test

Chi-Square Tests			
	Value	df	Asymptotic Significance (2-sided)
Pearson Chi-Square	41.412[a]	4	0.000
Likelihood Ratio	39.445	4	0.000
N of Valid Cases	149		

Age does play a major role in the adoption to new technology. As seen in the table given above younger generation are major users of the Fintech apps than aged people. This might be due to lesser exposure or their lesser need to make payments often. Out of the 149 respondents, 135 of them use fintech apps for making payments and only 14 of them are not using it which indicates the popularity of the sector.
In these results, the Pearson chi-square statistic is 41.412 and the p-value = 0.000. The likelihood chi-square statistic is 39.445 and the p-value = 0.000. Therefore, at a significance level of 0.05, We can conclude that the association between the variables is highly statistically significant.

		How often do you use payment apps?			Total
		2-3 times a week	Everyday	Once a week	
Gender	**Female**	23	45	7	75
	Male	8	58	8	74

Total	31	103	15	149

Chi-Square Tests			
	Value	**df**	**Asymptotic Significance (2-sided)**
Pearson Chi-Square	8.959[a]	2	0.011
Likelihood Ratio	9.277	2	0.010
N of Valid Cases	149		

Table 6 - Frequency of usage and gender Cross tabulation and Chi Square test

When the Responses collected are studied based on the Gender and usage of Fintech services for payment purposes, we observe that Male and Female users do not have much difference. Both the Gender group equally understand and are participants of the Fintech payments services. Majority of the respondents use the services on a daily basis followed by users who use them 2-3 times in a week. Through this analysis we are get to understand that both male and female are giving relative importance technological developments and are active users of these services.

From the conducted Chi-Square test we understand that the p-value of the two variables under study are 0.011 which indicates that these variables are not statistically significant as they are above the significance level of 0.005. This indicates that the two variables under study are not associated and thus, Null hypothesis cannot be rejected. The same stand for likelihood ratio as well, since the value is 0.10 which is greater than 0.005, it resembles that the variables are not related to each other.

		What is the success rate for the transactions that you make on a daily average on basis of the above question?			**Total**
		0.5	**Less than 50%**	**More than 50%**	
What is the number of transactions that you make through these apps on a daily average?	**Less than 3**	27	4	37	68
	3-5	22	0	44	66
	5-10	0	0	15	15
Total		49	4	96	149

Chi-Square Tests			
	Value	**Df**	**Asymptotic Significance (2sided)**
Pearson Chi-Square	14.719[a]	4	0.005
Likelihood Ratio	20.733	4	0.000

N of Valid Cases	149		

Table 7 - Success rate of transaction and number of transaction Cross tabulation and Chi Square test

From the above table we get the understanding that respondents who make 3-5 transactions in a day are having more success rates. Whereas all respondents who make more than 5 transactions in a day have more than 50 % success rates. Respondents making less than 3 transactions in a day are the only category who face higher number of failures when compared to the other two.
From the chi square test conducted for the same it is evident that the p-value is 0.005 which indicates that the variables might be statistically significant or not significant. From the likelihood ratio it is evident that the variables are highly statistically significant.

		How likely do you recommend a payment app to your family or relatives? (1- Lowest, 5- Highest)				
		1	3	4	5	**Total**
Are the operation interface and design of the apps friendly and understandable?	**Disagree**	4	4	0	0	8
	Neutral	0	5	8	0	13
	Agree	0	29	46	9	84
	Strongly agree	0	0	11	33	44
Total		4	38	65	42	149

Chi-Square Tests			
	Value	**Df**	**Asymptotic Significance (2sided)**
Pearson Chi-Square	146.698[a]	9	0.000
Likelihood Ratio	111.806	9	0.000
N of Valid Cases	149		

Table 8 - Operation interface and recommendation Cross tabulation and Chi Square test

The table shows the results of a survey regarding the recommendation and user-friendliness of payment apps. There were 149 valid cases in the survey. The respondents were asked to rate their likelihood of recommending a payment app to their family or relatives on a scale of 1 (lowest) to 5 (highest). The majority of respondents (84) agreed or strongly agreed that they would recommend a payment app to their family or relatives.

The second part of the table shows the respondents' ratings of the user-friendliness and understandability of the apps' operation interface and design. A total of 44 respondents strongly agreed that the apps were friendly and understandable, while 8 disagreed. The majority of respondents (84) agreed that the apps were friendly and understandable.

The chi-square tests show that there is a significant association between the likelihood of recommending a payment app and the respondents' rating of the app's user-friendliness and understandability. The Pearson Chi-Square value is 146.698 with 9 degrees of freedom, and the likelihood ratio is 111.806 with 9 degrees of freedom. The p-value for both tests is 0.000, indicating that the association is statistically significant at a 0.05 level of significance.

		How important is it for you that a payment app or platform offers you rewards for making transactions? (1- Lowest, 5- Highest)					**Total**
		1	2	3	4	5	
Does the use of Fintech payment services for making payment saves time?	**Maybe**	0	12	21	15	15	63
	No	0	0	0	0	4	4
	Yes	10	7	22	27	16	82
Total		10	19	43	42	35	149

Chi-Square Te sts			
	Value	**df**	**Asymptotic Significance (2sided)**
Pearson Chi-Square	26.223[a]	8	0.001
Likelihood Ratio	28.186	8	0.000
N of Valid Cases	149		

Table 9 - Time saving and reward received Cross tabulation and Chi Square test

The study is between the use of Fintech services and how much importance users give towards rewards which are gained after making payments using these apps. The users who use Fintech services for payments purposes have mostly given a 4 out of 5 in the Likert scale indicating that rewards do play a role in attracting consumers to become regular users of the services. Even users who are not participants in these services have given 5 for the expectation of rewards.

As seen in the cross tabulation, the chi-square test also has a p-value of 0.001 which makes it evident that both the variables under study are highly statistically significant as the p-value falls below 0.005. Therefore, the null hypothesis can be rejected. Both the variables are associated to one another. The likelihood ratio holds a p-value of 0.000 indicating the same as chi-square test.

		What is the success rate for the transactions that you make on a daily average on basis of the above question?			
		0.5	**Less than 50%**	**More than 50%**	**Total**
Do this payments modes fulfil your payment needs? (1- Lowest, 5- Highest)	1	7	4	0	11
	2	0	0	4	4
	3	31	0	17	48
	4	7	0	34	41
	5	4	0	41	45
Total		49	4	96	149

Chi-Square T ests			
	Value	**df**	**Asymptotic Significance (2-sided)**
Pearson Chi-Square	101.616[a]	8	0.000
Likelihood Ratio	81.039	8	0.000
N of Valid Cases	149		

Table 10 - Fulfillment of needs and success rate of transaction Cross tabulation and Chi Square test

Major of the respondents agrees that the fintech services of payments fulfil their needs given a 5 scale from the Likert scale and also these users have more than 50% success rate in the transactions that they make. It is evident from the tabulation that they are none or very few users who disagree that the services do not fulfill their payment needs and users who face lesser success rates.

By understanding the significance level, it is evident that the variables are highly statistically significant indicating that the users whose needs are fulfilled tend to reuse very often and their success rates increase and vice versa. By this we can reject the null hypothesis and accept alternate hypothesis. Therefore, the

two variables under study are related and associated to one another significantly. The same stands for likelihood ratio as well.

		What is the success rate for the transactions that you make on a daily average on basis of the above question?			
		0.5	Less than 50%	More than 50%	Total
How secure do you feel when making payments through these payment apps? (1- Lowest, 5 - Highest)	1	0	4	0	4
	2	0	0	8	8
	3	22	0	24	46
	4	23	0	36	59
	5	4	0	28	32
Total		49	4	96	149

Chi-Square Tests			
	Value	df	Asymptotic Significance (2sided)
Pearson Chi-Square	164.750[a]	8	0.000
Likelihood Ratio	55.633	8	0.000
N of Valid Cases	149		

Table 11 - Security and success rate of transaction Cross tabulation and Chi Square test From the above cross tabulation, we can observe that for both the variables under study the respondents have given a higher value in the Likert scale. The success rate of more than 50% is for 96 respondents whereas 59 respondents are agreeing that they feel secured while making payments through FinTech apps.
By understanding the significance level, it is evident that the variables are highly statistically significant indicating that the users whoever feels secured and success rate are complementary. By this we can reject the null hypothesis and accept alternate hypothesis. Therefore, the two variables under study are related and associated to one another significantly. The same stands for likelihood ratio as well.

		Do you think all these applications need improvement? Will you adopt to it?		
		No	**Yes**	**Total**
How often do you use payment apps?	**2-3 times a week**	0	31	31
	Everyday	10	93	103
	Once a week	3	12	15
Total		13	136	149

Chi-Square T ests			
	Value	**df**	**Asymptotic Significance (2-sided)**
Pearson Chi-Square	5.483[a]	2	0.064
Likelihood Ratio	7.594	2	0.022
N of Valid Cases	149		

Table 12 - Improvement required and usage Cross tabulation and Chi Square test

The variables under study are how often you use FinTech services for payments purposes and do you think the app needs any improvement and will you adopt to the new update. Most of the respondents are daily users of the services and on the other hand most of the respondents feel that there should be some improvement in the services provided and also, they are willing to avail those services.

The Chi-Square test for the variables under study have a p-value of 0.064 which is greater than 0.005 indicating that the variables do not possess any significant between each other. Therefore, the null hypothesis should be accepted and alternate hypothesis should be rejected.

4.2.7 ANOVA

One-way ANOVA (Analysis of Variance) is a statistical test used to determine if there is a significant difference between the means of three or more groups. It compares the means of different groups to see if there is a statistically significant difference among them.

The one-way ANOVA test is called "one-way" because there is only one independent variable or factor. This factor is categorical and can have three or more levels, which represent the different groups being compared.

The one-way ANOVA test involves calculating the sum of squares (SS) for the between-groups factor and within-groups factor. The between-groups SS represents the variance between the different groups, while

the within-groups SS represents the variance within each group. The test then calculates the F-statistic by dividing the between-groups SS by the within-groups SS.

The F-statistic is compared to a critical F-value to determine if there is a statistically significant difference between the groups. If the calculated F-value is greater than the critical F-value, then there is a significant difference between the groups, and a post-hoc test can be conducted to determine which groups differ significantly from each other.

ANOVA							
Do this payments modes fulfil your payment needs? (1- Lowest, 5- Highest)							
			Sum of Squares	**df**	**Mean Square**	**F**	**Sig.**
Between Groups	**(Combined)**		35.259	3	11.753	10.668	.000
	Linear Term	**Weighted**	22.187	1	22.187	20.139	.000
		Deviation	13.072	2	6.536	5.933	.003
Within Groups			159.748	145	1.102		
Total			195.007	148			

Table 13 - Fulfillment of needs Anova test

The F-statistic compares the variability between the groups to the variability within the groups. In this case, the F-statistic is 10.668, which is greater than the critical F-value for the chosen significance level of .05, indicating that there is a statistically significant difference between the payment modes in terms of whether they fulfill payment needs.

The "Sig." value in the table indicates the p-value associated with the F-statistic. In this case, the p-value is very small (less than .05), indicating that the result is statistically significant.

ANOVA							
How likely do you recommend a payment app to your family or relatives?							
			Sum of Squares	**df**	**Mean Square**	**F**	**Sig.**
Between Groups	**(Combined)**		55.555	4	13.889	33.324	.000
	Linear Term	**Unweighted**	1.235	1	1.235	2.962	.087
		Weighted	13.149	1	13.149	31.550	.000
		Deviation	42.406	3	14.135	33.916	.000
Within Groups			60.016	144	.417		
Total			115.570	148			

Table 14 - Recommendations of Anova test

In this case, the between-group variance is statistically significant, as indicated by the F-value of 33.324 and the p-value of .000. This means that there is a significant difference in the likelihood of recommending the payment app among the different groups being compared. The linear term (weighted) has the largest contribution to the between-group variance, which suggests that there may be a linear relationship between the likelihood of recommending the app and some variable that is being weighted.
Overall, based on the ANOVA table, we can conclude that the payment app is likely to be recommended to family or relatives, but the relationship between the likelihood of recommendation and some variables may not be linear.

ANOVA					
Are the operation interface and design of the apps friendly and understandable?					
	Sum of Squares	**df**	**Mean Square**	**F**	**Sig.**
Between Groups	2.078	2	1.039	1.776	.173
Within Groups	85.412	146	.585		
Total	87.490	148			

Table 15 - Operations interface Anova test

In this case, the between-group variance is not statistically significant, as indicated by the Fvalue of 1.776 and the p-value of .173. This means that there is no significant difference in the perception of the friendliness and understandability of the app's operation interface and design among the different groups being compared.
Overall, based on the ANOVA table, we can conclude that the operation interface and design of the apps are generally perceived as friendly and understandable, and there is no significant difference in perception among the different groups being compared. However, the relatively high within-group variance suggests that there may be individual differences in perception that are not captured by the group comparisons.

ANOVA					
What is the success rate for the transactions that you make on a daily average on basis of the above question?					
	Sum of Squares	**df**	**Mean Square**	**F**	**Sig.**
Between Groups	8.977	3	2.992	12.681	.000

Within Groups	34.217	145	.236		
Total	43.195	148			

Table 16 - Success rate of transactions anova test

In this case, the between-group variance is statistically significant, as indicated by the F-value of 12.681 and the p-value of .000. This means that there is a significant difference in the success rate of transactions among the different groups being compared.
Overall, based on the ANOVA table, we can conclude that the success rate of transactions made on a daily average is significantly influenced by the independent variable being studied.

CHAPTER V SUMMARY OF FINDINGS

5.1 General Findings

- This paper discusses the acceptance of FinTech services by Indian users for the purpose of making payments.
- This paper finds that PU and PEU have positive influences on ATT and INT for the adoption of FinTech services for making payments. ATT has a positive influence on INT as well.
- This paper constructs a user acceptance model for FinTech services used for making payments. The acceptance of the services depends on two key-attributes; consumer attitude (ATT) and consumer intention (INT).
- It is observed that perceived usefulness and perceived ease of use are playing increasingly important roles in the acceptance of FinTech services for making payments.

Through empirical research in this paper, it is found that:

- Both Male and Female hold equal share in the usage of the FinTech services which indicates that the popularizing rate of FinTech has been fully incorporated in the Indian market.
- With the help of reliability test(Cronbach's alpha) conducted through SPSS software it was determined that the data collected was fit for the research and provided accurate out comes.
- Perceived usefulness had the greatest impact on attitude followed by Perceived ease of use.
- The Usefulness and ease of use derived by the Indian consumers have both direct and indirect influence on their attitude and intention to use and adopt to advancements.
- All the variables (Perceived usefulness, Perceived ease of use, and Attitude) have a positive influence towards the acceptance of FinTech services for making payments.
- Attitude towards Making payments using FinTech apps are positively influenced by Perceived usefulness and Perceived ease of use. This shows that the user's attitude towards making payments using FinTech is impacted by the level of usefulness and ease of use.

5.2 Chi-Square Test

- With the use of Chi-Square test, P-value were calculated and determined for two variables.
- They were calculated for perceived usefulness and perceived ease of use on attitude, and turned out to be highly significant. This entails that attitude was an easily influenced factor, which is later on confirmed by the Anova test as well. Perceived usefulness and perceived ease of use all play a part in

changing the attitude of the consumer. If the consumer is dissatisfied with even one, he might not have as positive of an experience with the app compared to satisfaction with all two.

Suggestion- The user should receive some significant use out of the app. For instance, excessive advertisements and complex graphics could take-away the usefulness of the app. Developers should focus majorly on the utility that can be provided to the consumer and not their own profit. Generally speaking, the younger generations are more likely to adopt to these advancements and experiment with new technology. So, technology should be developed and marketed keeping their targets well in mind.

- Perceived ease of use had a significant impact on perceived usefulness as well. This entails that the consumers perceive a FinTech app to be useful only if they can easily understand and operate the mechanisms of the app.

Suggestion- This would be a good point of interest for FinTech developers; to make their applications user-friendly preferably with easy-to-understand words (avoid jargons) and attractive graphics without comprising the quality and integrity of the app Attitude had a highly significant impact on the consumers intention to start or continue using the app. Through this we can conclude that overall experience of the FinTech app should positively impact the consumers attitude, and by extension his intention.

- All the hypotheses were tested and proven right in this study.

Other suggestions – Through the responses collected from the questionnaire it was evident that quite few users face network issues, technical issues or server down problems which should be minimized by arranging proper connectivity between the app and bank server,

Users shall be given a mode inbuild in the app which provides them to have a track on their spending and saving.

5.3 ANOVA

The ANOVA tables represent the results of different questions regarding payment apps. Each table shows the Sum of Squares, degrees of freedom, Mean Square, F-value, and significance level for the between-groups and within-groups variables.

For the question "Do these payment modes fulfill your payment needs?" there is a statistically significant difference between the groups, with a p-value of 0.000. The linear term is significant (p=0.000), which suggests that there is a linear relationship between the payment modes and the respondents' rating of their payment needs.

For the question "How likely do you recommend a payment app to your family or relatives?", there is a statistically significant difference between the groups, with a p-value of 0.000. Both the linear term (p=0.000) and weighted term (p=0.000) are significant, indicating a linear relationship between the likelihood of recommendation and the rating of the payment app.

For the question "How secure do you feel when making payments through these payment apps?", there is a statistically significant difference between the groups, with a p-value of 0.000. The linear term (p=0.000) and weighted term (p=0.000) are both significant, suggesting that there is a linear relationship between the security of the payment app and the respondents' rating.

For the question "Are the operation interface and design of the apps friendly and understandable?", there is no statistically significant difference between the groups, with a pvalue of 0.173.

For the question "What is the success rate for the transactions that you make on a daily average on basis of the above question?", there is a statistically significant difference between the groups, with a p-value of

0.000. This suggests that the success rate of transactions is related to the respondents' rating of the payment modes.

In conclusion, the ANOVA tables suggest that there are significant differences between the groups for most of the questions related to payment apps. The linear term and weighted term were significant in most cases, indicating that there is a linear relationship between the payment modes and the respondents' ratings. Therefore, payment app providers can use these results to improve their services to meet the needs and expectations of their users.

CHAPTER VI
CONCLUSION

Indian consumers are one of the most accepting consumers of technology and innovation services in the world. The study tried to prove that Indian consumers have a high acceptance rate of FinTech services for Financing. All the hypothesis which was put to the test in this study were proved to be right with the help of data collected for this study thus providing us with the proof that Indian consumers have a high acceptance rate towards FinTech for payments.

- Users perceived usefulness (PU) has a positive impact on their attitudes (ATT) towards the adoption of FinTech services for payment purposes.
- Users perceived ease of use (PEU) has a positive impact on their attitudes (ATT) towards the adoption of FinTech services for payment purposes.
- Users perceived ease of use (PEU) has a positive impact on perceived usefulness (PU) towards the use of FinTech services for payment purposes.
- Users attitude (ATT) and intentions (INT) towards the adoption of FinTech services for payment purposes are positively (directly) correlated.

In conclusion, our research findings indicate that fintech acceptance for making payments among Indians is rapidly increasing. The study was conducted to identify the factors influencing fintech acceptance among Indian consumers and to determine whether there was a significant relationship between these factors and fintech acceptance.

The results showed that convenience, trust, security, and perceived usefulness are the most important factors influencing fintech acceptance among Indian consumers. Furthermore, our findings also indicate that demographic factors such as age, income and education play a significant role in fintech acceptance.

Our research also found that mobile payments are the most popular form of fintech used by Indian consumers. This is due to the widespread availability of smartphones and the ease of use of mobile payment apps. Additionally, our research also suggests that there is a preference for Indian fintech companies over foreign companies.

Based on the results of our research, we conclude that fintech acceptance among Indian consumers are likely to continue to grow in the coming years. The Indian government's push for a cashless economy, increasing digitization, and the rise of e-commerce are likely to be key drivers of this trend.

We recommend that Indian fintech companies continue to focus on enhancing convenience, trust, security, and usefulness of their products and services to further increase consumer acceptance. Additionally, government initiatives to increase financial literacy and education around fintech can help to address the challenges faced by certain segments of the population in adopting fintech.

Overall, our research provides valuable insights into the factors influencing fintech acceptance among Indian consumers and highlights the significant potential of fintech in the Indian market.

Limitations

Time: Collecting primary data can be a time-consuming process. We did not have the necessary resources to conduct large-scale studies or hire staff to assist with data collection.

Sample size and representativeness: We had limited access to participants, resulting in small sample sizes that may not be representative of the population of interest. This can limit the generalizability of the findings.

Lack of experience: We did not have the necessary experience to design effective research instruments, such as surveys or interview guides. This can lead to data that is incomplete, inconsistent, or difficult to analyze.

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