

Transforming the Remittance Industry: The Power of Digital Payments



Table of Contents

03	Introduction
04	Technological Innovations in Remittance
05	Mobile Phones and the Internet
07	Bank Accounts
07	Aadhaar
07	Debit and Credit Cards
08	RuPay Cards
08	Enhancing Cross-border Payment Through ID
10	The Prospect of Fintech in Remittance
11	The Impact of Tax/Levy on Consumer Payment Choices in the Remittance Industry
11	Financial Implications of Taxes/Levies
11	Rise of Digital Payments Platforms
11	Influence on Cash-Based Remittances
11	Government Initiatives and Incentives
12	Consumer Education and Awareness
12	Regulatory Sandbox and Payment Models
13	Conclusion

Introduction

In an era of rapid technological advancements, the landscape of remittance transactions has experienced significant transformations. As we delve into 2023, it becomes crucial to explore the projections, insights, and analysis surrounding the use of technology in Remittance, sending, and receiving. This report aims to shed light on the evolving nature of remittances and how technological innovations have shaped this vital aspect of international financial transactions. Over the past decade, mobile money and digital wallets have emerged as powerful tools, revolutionizing how remittances are conducted. The convenience, speed, and accessibility offered by these digital platforms have attracted users and created new opportunities for financial inclusion.

With the global adoption of smartphones and the increasing penetration of Internet services, mobile money and digital wallets for remittance transactions have witnessed a remarkable surge. By examining the impact of technological innovation in remittance services, this report aims to provide valuable insights into the usage patterns, preferences, and satisfaction levels of individuals utilizing mobile money and digital wallets for sending or receiving remittances. It explores the factors that have influenced the adoption of these methods, such as convenience, speed, lower transaction fees, enhanced security measures, and trust in technology providers.

As Agpaytech navigates through the projections for 2023, this report seeks to analyze the impact of mobile money and digital wallets on individuals' financial management and control. By exploring the extent to which these technologies have empowered users to manage their finances efficiently, we gain a deeper understanding of their transformative potential. Ultimately, this report presents a comprehensive overview of mobile money and digital wallets' usage, satisfaction, and prospects for remittance transactions. By gathering insights and conducting analysis, we strive to offer valuable information to stakeholders in the remittance industry, financial institutions, technology providers, and individuals seeking efficient, secure, and cost-effective solutions for their remittance needs.

Technological Innovations in Remittance



Remittance has significantly transformed, revolutionizing how foreign workers transfer money to their home countries. The primary purpose of remittances is to support families and contribute to the local economy. These technological innovations have brought about faster, more convenient, and more secure processes for sending, receiving, and processing remittances. In addition, digital remittances have brought numerous benefits, including increased living standards for families, a boost in national income, and overall GDP growth. Digital remittances have gained popularity among consumers due to their convenience, speed, lower cost, and elimination of tedious form-filling processes, agents, and codes. Various factors have driven this shift in consumer focus towards digital transactions for money remittance.

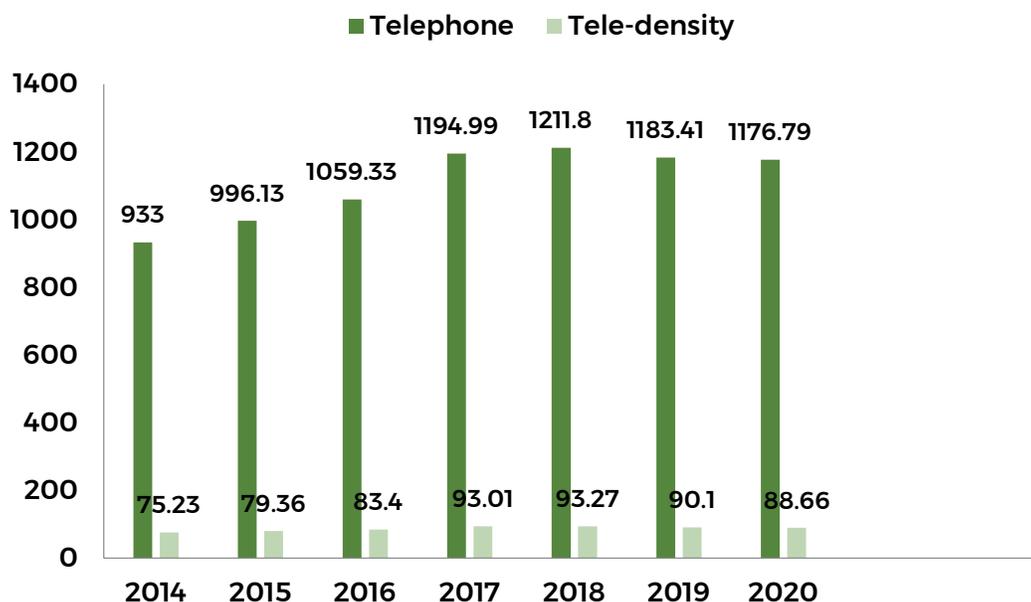
In India, the Reserve Bank of India (RBI) has played a crucial role as the primary enabler of digital payments. They have been involved in every stage, from conceptualization to execution, and have invested in knowledge and technology for payment systems that involve significant capital expenditure. These payment systems include Magnetic Ink Character Recognition (MICR), Cheque Truncation System (CTS), Electronic Clearing Service (ECS), Real-Time Gross Settlement (RTGS) for large-value payments, and National Electronic Funds Transfer (NEFT) for retail payments, among others. The RBI's efforts have paved the way for the country's widespread adoption of digital payments.

Mobile Phones and the Internet

India has witnessed remarkable growth in its infrastructure, particularly in the expansion of mobile cellular networks, over the past decade. This development has been instrumental in leveraging the increasing mobile density and mobile internet users to provide accessible payment services by both banks and non-bank payment system providers.

In addition to offering Internet banking, banks have introduced mobile banking services through various channels such as short message service (SMS), Unstructured Supplementary Services Data (USSD), and mobile applications. As of October 2020, India had an impressive number of over 1.151 billion wireless telephone subscribers, resulting in a tele density of 84.90%. Notably, the urban tele density stood at 136.65%, while the rural tele density was 58.72%, and both continue to grow. The increased usage of smartphones has played a significant role in driving the adoption of digital payments. Moreover, this infrastructure growth has spurred several innovative payment mechanisms, including the tokenization, and scanning of Quick Response (QR) codes for smartphone-based payments. Internet usage in India has also been on the rise. A report by the Internet and Mobile Association of India (IAMAI) indicates that the average Indian now spends more on mobile data services than voice services, marking a shift in consumer behaviour. As of October 2020, there were over 713 million wireless broadband subscribers and 21 million wireline broadband subscribers in the

Figure 1: Trend of total telephones and tele density in the country



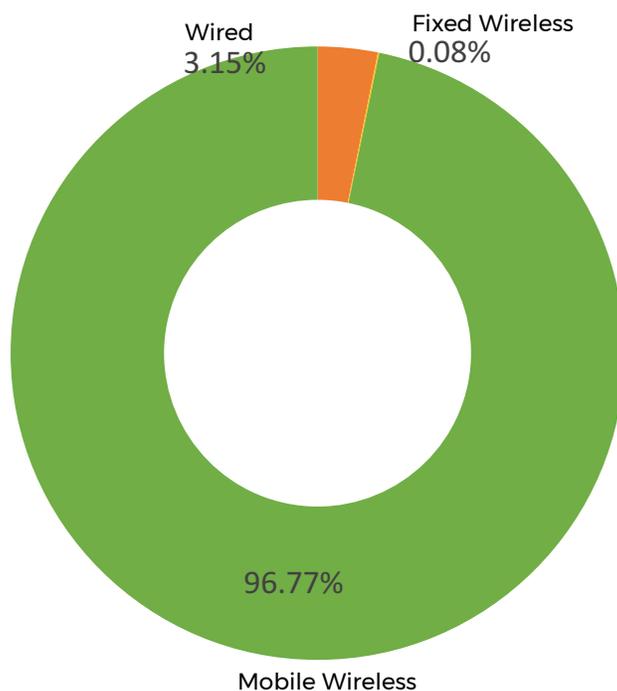
Source: DOT (Department of Telecommunication)

The rise in internet accessibility has played a crucial role in facilitating and expediting the acceptance of digital payment methods. The widespread availability of 3G and 4G networks, even in remote regions, has fuelled a transformative “Digital Revolution” in India, progressively transitioning into a “Digital Payments Revolution.” Recent data reveals that the average Indian now consumes approximately 10 GB of data per month, highlighting the significant reliance on digital connectivity.

Moreover, this infrastructure growth has spurred several innovative payment mechanisms, including the tokenization, and scanning of Quick Response (QR) codes for smartphone-based payments. Internet usage in India has also been on the rise. A report by the Internet and Mobile Association of India (IAMAI) indicates that the average Indian now spends more on mobile data services than voice services, marking a shift in consumer behaviour. As of October 2020, there were over 713 million wireless broadband subscribers and 21 million wireline broadband subscribers in the country.

The rise in internet accessibility has played a crucial role in facilitating and expediting the acceptance of digital payment methods. The widespread availability of 3G and 4G networks, even in remote regions, has fuelled a transformative “Digital Revolution” in India, progressively transitioning into a “Digital Payments Revolution.” Recent data reveals that the average Indian now consumes approximately 10 GB of data per month, highlighting the significant reliance on digital connectivity.

Figure 2: Composition of Internet subscription



Source: International Telecommunications Union (ITU)

Bank Accounts

As of March 2020, the total number of deposit accounts in India reached an impressive 2.35 billion. This figure encompasses deposit accounts held in various types of commercial banks, including Local Area Banks (LABs), Payment Banks (PBs), Small Finance Banks (SFBs), Regional Rural Banks (RRBs), and Cooperative Banks across the country. The widespread availability of these bank accounts has played a vital role in facilitating the adoption of digital payment methods, allowing seamless transactions to and from these accounts.

Aadhaar

Since its introduction in 2009, Aadhaar, a unique identification number, has been issued to more than 1.27 billion individuals across India. Implementing Aadhaar-enabled e-KYC (Electronic-Know Your Customer) has significantly fostered the country's exponential growth of digital payments. Aadhaar has been used to authenticate merchants' payments and transactions facilitated through Business Correspondents (BCs). Aadhaar biometric identification has witnessed an increased presence in Government to Person (G2P) payments, effectively combating fraudulent beneficiaries and reducing system leakages. These payment systems have facilitated this transition from cash to electronic payment methods.

While Aadhaar has faced legal challenges, its acceptance and use in payments have experienced fluctuations over time. Interestingly, many other jurisdictions view Aadhaar as a successful experiment. The availability of biometric identification, encompassing fingerprints, face scans, and iris scans, can be harnessed to enhance digital payments further. However, it is crucial to consider privacy and other concerns associated with this technology.

Debit and Credit Cards

In India, credit cards are not widely embraced and have often been associated with exclusivity. However, there has been a substantial increase in the issuance of debit cards over the past decade, specifically between FY 2010-11 and FY 2019-20. During this period, the number of debit cards issued rose from 227.8 million to 828.6 million. Approximately 300 million were RuPay debit cards issued to Basic Savings Bank Deposit (BSBD) account holders. Concurrently, the issuance of credit cards also experienced growth, albeit to a lesser extent. The number of credit cards issued increased from 18 million to 57.7 million during the same period. This surge in card issuance has played a pivotal role in driving the expansion of online and physical Point of Sale (PoS) terminal-based card payments, thereby promoting digital transactions.

Banks were prompted to issue new cards to comply with the regulatory requirement of converting all existing Magstripe cards to Europay Master Visa (EMV) Chip and Personal Identification Number (PIN) compliant cards by December 31, 2018. Consequently, deactivated cards were removed from the banking systems, resulting in a decrease in outstanding debit cards in FY 2019-20. The consolidation of public sector banks has also contributed to this reduction.

RuPay Cards

RuPay, introduced in 2012 by the National Payments Corporation of India (NPCI), is a domestically developed card payment network. Its emergence coincided with the drive towards a less cash-dependent economy following the demonetization initiative in 2016. The issuance of RuPay cards for Basic Savings Bank Deposit (BSBD) accounts has significantly contributed to the increased acceptance of card payments in the country's interior regions, where card-based transactions were relatively uncommon just a few years ago. RuPay has gained popularity through its widely used debit card and the growing acceptance of its credit version.

Countries promoting domestic card networks have transitioned faster away from cash reliance. Although India joined the domestic card market relatively late, with RuPay holding only a 15% share of total cards issued in 2017, the landscape has significantly changed. As of November 30, 2020, nearly 1,158 banks had issued around 603.6 million RuPay cards, accounting for over 60% of the total cards issued in India. Notably, many RuPay cards are debit cards, with only 970,000 credit cards issued as of November 30, 2020.

RuPay has also expanded internationally by integrating with the Bhutan Financial Switch, enabling the acceptance and issuance of RuPay cards in Bhutan. To enhance its global acceptance, RuPay has established partnerships with other payment networks such as UnionPay (China), JCB (Japan), NETS (Singapore), BC Card (South Korea), Elo (Brazil), DinaCard (Serbia), as well as Discover and Diner Club. As a result, RuPay is now accepted across 195 countries worldwide, showcasing its widespread presence.

Enhancing Cross-border Payment Through ID

In a groundbreaking collaboration, the Reserve Bank of India (RBI) and the Monetary Authority of Singapore (MAS) have introduced an innovative project to interconnect their fast payment systems, UPI (Unified Payments Interface) and PayNow. This remarkable linkage is poised to revolutionize how users of these systems conduct instant fund transfers or remittances without the need to onboard into the recipient's system. It enables UPI users to seamlessly transfer funds to PayNow users in Singapore and vice versa, eliminating the requirement for membership in the recipient's payment system. This development paves the way for both countries' frictionless and convenient cross-border transactions.

Building upon the successful efforts of NPCI International Payments Limited (NIPL) and Singapore's Network for Electronic Transfers (NETS), the Reserve Bank of India (RBI) and the Monetary Authority of Singapore (MAS) have embarked on a collaborative initiative. This initiative aims to enhance the interoperability and convenience of cross-border transactions by connecting their respective fast payment systems, UPI and PayNow.

The foundation laid by the QR code-based payment facilitation through UPI in Singapore serves as a stepping stone for this strategic linkage. By seamlessly integrating UPI and PayNow, the RBI and MAS are taking significant strides toward bridging the gap between digital payment ecosystems in India and Singapore. This partnership aligns with the RBI's vision of reevaluating inbound remittance corridors and furthering the efficiency and accessibility of remittance services.

The UPI-PayNow collaboration holds great potential in promoting cross-border interoperability, benefiting trade, travel, and remittance flows between India and Singapore. With a substantial number of Indian workers and students residing in Singapore, the annual volume of inbound and outbound remittances surpasses USD 1 billion. The UPI-PayNow linkage marks a milestone in establishing a robust infrastructure for seamless cross-border payments between the two nations.

This partnership aligns with the financial inclusion priority of the G20, emphasizing the need for faster, cost-effective, and transparent cross-border transactions. The integration of UPI and PayNow directly contributes to the United Nations' Sustainable Development Goals (SDG 10. c) by enabling swift and secure remittance transfers. It addresses SDG 10. c by reducing the costs associated with remittances and ensuring their affordability.

The integration of UPI and PayNow enhances the efficiency of cross-border payments and strengthens economic cooperation and ties between India and Singapore. This significant step fosters financial inclusivity and accessibility for individuals and businesses alike. Moreover, it substantially reduces the costs of cross-border remittances, benefiting a wide range of users and contributing to realizing sustainable development objectives.

“

This partnership aligns with the financial inclusion priority of the G20, emphasizing the need for faster, cost-effective, and transparent cross-border transactions.

”



The Prospect of Fintech in Remittance

Foreign remittances are a 'lifeline' for millions across the globe, and nowhere is this more evident than in India. In fact, with more than 30 million Indians residing outside the country, India is the world's most significant inward remittance corridor, receiving \$87 billion in 2021, according to the World Bank. When an unprecedented pandemic hit the world in early 2020, there was much concern that debilitating lockdowns would cause declines in remittance flows. However, these fears were unfounded, and remittance flows remained resilient owing to factors including the shift to digital methods of money transfers facilitated by technology-based solutions. While remittances have existed in both informal and formal ways, the pandemic has accelerated a shift to more formal channels. Thanks to technology, people can transfer money using digital cross-border payment services, allowing funds to flow even during lockdowns and travel bans.

According to the World Bank, remittance corridors with digital payment options have increased every quarter since 2016, nearly tripling in the last four years. Rising to meet these expectations is a new breed of service providers overhauling the industry by combining fair exchange rates with more reliable, fast, and simple ways to send money across borders securely. Companies like Wise have even built alternatives to replace the outdated correspondent banking system, thus eliminating expensive intermediaries and bottlenecks. Companies in this space have plenty more to solve for, and the race is now on to bring prices even lower and offer more efficient and convenient services. The key to delivering a better experience can be found in digital transformation and strategic partnerships. Many technological innovations have enabled this for the remittance sector.

- ▶ Firstly, the Application Programming Interface (API) development has impacted the industry significantly. Employing new technology can enhance a bank's offering, and APIs enable incumbents to collaborate with fintech, leveraging their innovation to offer an enhanced product offering.
- ▶ Secondly, countries worldwide have made considerable leaps in modernizing payment infrastructure. With her real-time payment rails, Unified Payment Interface (UPI), India is a prime example of stellar forward-thinking. We have also seen countries in the region, such as Singapore, allowing non-banks to gain direct access to their real-time payment infrastructure, which enables these providers to offer customers even faster and cheaper international transactions.

Lastly, and perhaps the most underrated shift for consumers, has been eliminating the need to visit a bank physically. Gone are the days of long queues at the banks or having to go to a physical remittance branch to send money. People want to transact money online and on the move with their smartphones.

The Impact of Tax/Levy on Consumer Payment Choices in the Remittance Industry

The remittance industry is a vital link between individuals living in different countries, enabling them to send money to their families and loved ones across borders. In this industry, the impact of taxes and levies on consumer payment choices holds considerable importance.

Financial Implications of Taxes/Levies

Taxes and levies imposed by governments can significantly impact the cost of remittance transactions. These charges may be applied as a percentage of the transaction value or as fixed fees. Higher tax rates or levies can increase the overall cost of remittances for consumers, directly affecting their choice of payment methods.

Effect on Traditional Payment Methods: Traditional payment methods, such as bank and wire transfers, are subject to taxation and levies. These charges can be substantial, leading consumers to explore alternative payment options. Higher tax rates on traditional methods may discourage consumers from using them as they seek more cost-effective solutions.

Rise of Digital Payments Platforms

The advent of digital payment platforms has provided consumers with alternative and innovative ways to send money internationally. These platforms often offer competitive rates and lower fees, presenting a more attractive option for consumers. Some digital payment providers may also absorb certain tax or levy costs, making their services more appealing.

Influence on Cash-Based Remittances

Cash-based remittances, where the sender physically provides money to a remittance agent for transfer, can also be affected by taxes and levies. Higher taxation on cash transactions may push consumers towards digital alternatives, which may be subject to lower tax rates or levies. This shift reflects consumers' evolving preferences seeking more convenient and cost-effective remittance methods.

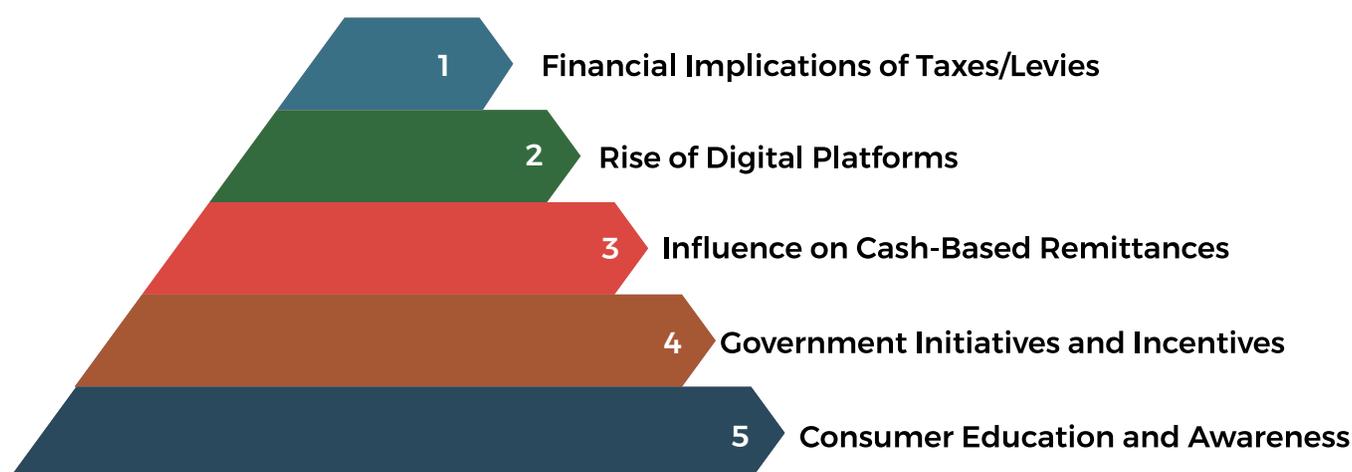
Government Initiatives and Incentives

Governments recognizing the impact of taxes and levies on remittance payments have taken steps to address this issue. Some countries have introduced incentives, such as reduced tax rates or waivers, to encourage the use of formal remittance channels. These initiatives aim to steer consumers away from informal, unregulated methods and promote the use of transparent and regulated payment platforms..

Consumer Education and Awareness

Consumer knowledge and awareness of tax implications in the remittance industry are crucial factors in shaping payment choices. Governments and industry stakeholders must strive to educate consumers about the impact of taxes and levies on different payment methods. It can help individuals make informed decisions when selecting their preferred payment channels, considering both cost-effectiveness and compliance with tax regulations.

Figure 3: Types of the taxes impacted in remittance.



Source: Agpaytech Research

Regulatory Sandbox and Payment Models

The payments industry has undergone fundamental changes over the past ten years. According to the Global Payment Systems Survey (GPSS) conducted by the World Bank, the use of retail payment instruments differs among countries due to cultural, historical, economic, and legal factors. Central banks worldwide have been designing policies to build cashless economies while ensuring safe, secure, and robust payment systems. Multiple triggers have been driving reforms across the global landscape of payment systems. These include customer behaviour and expectations, technological innovation, the emergence of non-banking and FinTech players, financial inclusion and the need for better payment instruments and settlement services.

Regulatory institutions and central banks follow certain guiding principles to draft policies and guidelines to regulate and govern critical stakeholders within the digital payments ecosystem.

These guiding principles broadly cover the following areas:

- ▶ **Customer fund protection:** The digital payment instrument customers use should protect their funds from any losses. The amount is credited to the customer's bank account if a digital transaction fails.
- ▶ **Safety and security:** The payment data is sensitive, and the payment instrument provider must maintain security by adopting new messaging standards and maintaining data security. Some countries have issued Payment Services Directive 2 (PSD 2) to identify customers whenever a transaction above a specific limit is recorded to reduce the risk and increase security.
- ▶ **Cost-effective:** Digital payment options must be cost-effective in terms of fees/charges to replace cash and enable large-scale adoption. Central banks have also been helping the digital payments ecosystem by allocating dedicated funds to boost the existing payments infrastructure. For example, the Reserve Bank of India (RBI) has published a framework for setting up a Payment Infrastructure Development Fund (PIDF) to increase the acceptance of cards in tier 3 to 6 cities.
- ▶ **Customer education:** Customers must be educated about digital payment instruments while keeping sensitive information confidential to avoid fraudulent activities/transactions.
- ▶ **New entrants:** Central banks are exploring options for lowering the entry barriers into the digital payments ecosystem for payments and lending FinTechs, payments service providers and other non-banking entities. In some countries, these players are encouraged to apply for licenses for issuing stored-value facilities (SVFs), credit cards, digital currencies, setting up merchant acquiring businesses and cross-border remittance businesses. These companies are provided licences under a pre-defined criterion by central banks.
- ▶ **Latest and innovative tech:** Innovation is the backbone of technology, and payment instruments are also required to develop innovative solutions to address existing challenges and utilize the latest technology to enhance digital payments. In addition to the guiding principles, regulators are also undertaking steps to ensure regulatory supervision through data-driven or rule-based, principle-based, and hybrid approaches. This section will focus on some global reforms across key payment instruments.

Figure 4: Guiding principles for regulators and central banks



Source: PWC

International remittances contribute over 20% of certain countries' gross domestic product (GDP). Central banks have recognized the importance of remittances for economic development and growth and have therefore drafted policies to control the operations of remittance service providers (RSPs). Commercial banks, international money transfer operators (MTOs), local MTOs, postal networks, exchange bureaus and agents can all be categorized as RSPs. Cash is still one of the dominant payment instruments in developing countries. Regulators and central banks in many developing countries are forming policies and guidelines to enable e-money and account-to-account bank transfers to reduce the overall dependency on cash and gradually move towards a cashless economy. The average cost of Remittance currently stands at 7% and is targeted to be lowered to 3% under the United Nations (UN) designed Sustainable Development Goals by inviting new players to operate and leverage on partnerships.

Conclusion



Digital payments have proven to be a transformative force in facilitating Remittance, providing numerous benefits for both senders and recipients. By leveraging technological advancements, digital payment platforms have substantially improved the efficiency, speed, security, and accessibility of remittance services. Aadhaar and RuPay have emerged as powerful tools in revolutionizing how remittances are sent and received, significantly easing the process for millions of people in India. These two initiatives, introduced by the Indian government, have brought immense convenience, security, and financial inclusion to the remittance landscape.

The future of remittance lies in the continued integration of digital payment solutions with innovative technologies. As the world becomes increasingly interconnected and mobile penetration rises, the potential for digital remittance services to positively impact global economies and the lives of millions is immense.

A woman with dark hair, wearing a light-colored cardigan, is looking down at a white contactless payment terminal. The terminal is being held by another person whose hands and a light blue shirt are visible. The terminal displays a blue screen with a logo and a Visa card is being held over it. In the background, there are wooden shelves with various glass jars and white packets, suggesting a pharmacy or a health store.

References

(2020). Enabling framework for regulatory .

(2022). How the remittance space has evolved with technology.

(2022). India and Singapore to link their fast payment systems-UPI and PayNow.

(2021). Payment System in India.

(2020). Payments regulations:Understanding the global state of play.

(2021). Telecom Regulatory Authority of India.

(2020). Telecom-statistics India.

(2020). Enabling framework for regulatory .

(2022). How the remittance space has evolved with technology.

(2022). India and Singapore to link their fast payent systems-UPI and PayNow.

(2021). Payment System in India.

(2020). Payments regulations:Understanding the global state of play.

(2021). Telecom Regulatory Authority of India.

(2020). Telecom-statistics India.

About Agpaytech

Agpaytech Ltd. is a company pioneering in the Fintech Space with a focused approach to building robust technologies for eCommerce Card Processing Solutions for Payment Service Providers (PSPs). Additionally, we provide Compliance and Regulatory Umbrella, Remittance-as-a-Service, Banking-as-a-service, Foreign Exchange, Cross Border Payments, and digital currency technology. We have partnered with multiple banks, non-banking financial institutions, and corporate organizations to create a solid service delivery model for them and their customers to ease their international remittances and payments concerns. Website: www.agpaytech.co.uk

United Kingdom
AGPAYTECH LTD.
3rd Floor, 86-90 Paul Street
London, EC2A 4NE, UK

United States of America
AGPAYTECH USA LLC
9701 Apollo Dr Suite 100
Largo MD, 20774, USA

Email: info@agpaytech.com
Website: www.agpaytech.co.uk