

# Evolution Of The Payment Gateway In India



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## Introduction

Payment gateway services have revolutionized how businesses in India receive payments from customers. The widespread use of digital payment solutions has made it easier for businesses to accept payments from customers in-store and online. Payment gateways provide businesses with a secure and efficient way to process payments and manage their finances. A payment gateway is an online service that enables merchants to accept customer payments and securely process them in a secure environment. Merchants can use payment gateways to accept payments from customers in any currency of their choice.

# Payment Aggregator in India

The payment service provider handles all the technical aspects of the transaction and ensures the safety of customer data. However, some payment providers in India offer businesses a range of services. Some of India's most popular payment gateway services include Paytm, Razorpay, Citrus Pay, Instamojo, PayU, and CCAvenue. These payment services allow merchants to accept payments from customers securely and conveniently.



- **Paytm** is one of the most popular payment gateway services in India. It allows merchants to accept customer payments in multiple currencies, including Indian rupees, US Dollars, and Euros. Paytm offers various payment options, including credit/debit cards, net banking, and UPI.



- **Razorpay** is another popular payment gateway service in India that allows merchants to accept payments from customers in multiple currencies. Razorpay allows merchants to accept customer payments through credit/debit cards, net banking, UPI, and wallet services.



- **Citrus Pay** is another payment gateway service provider in India that allows merchants to accept payments from customers in multiple currencies. Citrus Pay offers various payment options, including credit/debit cards, net banking, wallet services, and UPI.



- **Instamojo** is a payment gateway service provider in India that enables merchants to accept payments from customers in multiple currencies. Instamojo offers various payment options, including credit/debit cards, net banking, UPI, and wallet services.



- **PayU** is a payment gateway service provider in India that allows merchants to accept payments from customers in multiple currencies. PayU offers many payment options, including credit/debit cards, net banking, UPI, and wallet services.



- **CC Avenue** is a payment gateway service provider in India that enables merchants to accept payments from customers in multiple currencies. CC Avenue offers various payment options, including credit/debit cards, net banking, UPI, and wallet services.



- **UPI** stands for Unified Payment Interface, a secure payment system developed by the National Payments Corporation of India (NPCI). This payment gateway allows customers to make payments directly from their bank accounts. This payment gateway is secure and convenient. Customers can use their loyalty points, and cash-back offers to make payments. Some of the popular payment gateways in India that accept UPI payments include PayU, HDFC Bank, ICICI Bank, and Axis Bank.



Table 1: Comparing the Top 10 Payment Gateways in India

Payment Gateway	Razorpay	PayU	CCAvenue	Paytm	Instamojo
Pricing	2% Razorpay platform fee	2% + GST	1.85% for Indian Credit/ Debit cards and net banking	UPI: 0% (standard) & Rs.5 to 65 per mandate subscription) Paytm wallet: 1.99% Card: 0.4 to 0.9% International PG: 2.9%	Credit Card, debit card, net banking, UPI, wallets (GST Extra): 1.90% per transaction International credit card, EMI, AMEX, Diners (GST Extra): 2.90% per transaction
Support Service	Get support	24/7 Integration support	Support available	Yes	No
Payment Methods Supported	Razorpay Payment Methods	100+ Options	Credit/debit card, UPI, net banking and 200+ payment methods	Cashfree Payment Methods	Multiple Payment Methods
Foreign Currency Support	Yes	Yes	Yes	Yes	No
Security	PCI, DSS	PayU Security	PCI, DSS	PCI, DSS	N/A
Recurring Payments	N/A	Yes	Yes	Yes	Yes
Partial Payments	Yes	N/A	Yes	Yes	Yes
Refund	Yes	Yes	Yes	Yes	Yes
GST-compliant Invoices	Yes	Yes	Yes	Yes	N/A

Source: Agpaytech research (Meetanshi.com)

These payment services allow merchants to process customer payments in a secure environment securely. They also provide merchants with the ability to track and manage their finances. Payment service providers are an essential part of any business's payment processing system, and they are becoming increasingly popular in India. According to Statista, online payments in India are expected to grow with more than 20% CAGR between 2019 and 2023. It is estimated to reach 660 million Indians leveraging online payment by the end of 2023.

## Challenges to India's digital payment system

With the rise of digital payments and the ubiquity of mobile phones, India has recently seen a surge in digital payments. However, despite the growth of digital payments, many challenges need to be addressed to ensure that India's digital payment system is secure and efficient.

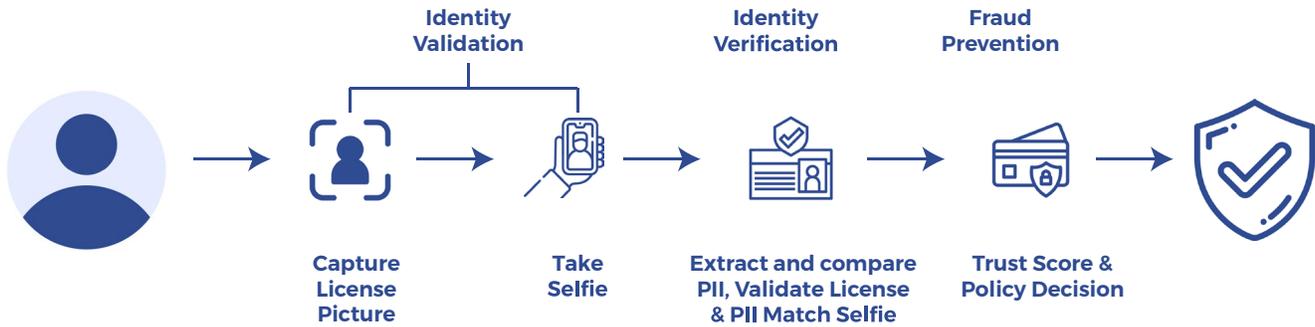
- Cyber security is one of the biggest challenges facing India's digital payment system. As digital payments become more popular, fraudsters and hackers are taking advantage of the system's vulnerabilities. To ensure the safety and security of digital payments, it is essential to have strong security measures in place. This includes encryption and authentication technologies and robust fraud prevention mechanisms.
- Another challenge facing India's digital payment system is more awareness. Many consumers still need to learn about the advantages and safety of using digital payments. This is a significant challenge as it hinders the growth of digital payments in India. Educating consumers about the benefits and safety of digital payments is essential to address this issue.
- A third challenge faced by India's digital payment system is the need for more infrastructure. To ensure that digital payments are efficient, the infrastructure needed to support the system must be invested. This includes investments in technology, such as the internet, mobile phones, and payment gateways. Currently, many digital payment systems are not accessible to rural and low-income populations. To ensure that all citizens have access to digital payments, more investments must be made in the infrastructure and technology needed to enable access. These are just some of the challenges facing India's digital payment system.

# Authentication and verification process using online payments.

In India, the use of authentication and verification processes in payments is rising. With the implementation of the Unified Payments Interface (UPI), businesses are now able to authenticate and verify payments securely and quickly. UPI is a real-time interbank payment system that allows businesses to securely and quickly send and receive payments. UPI also allows businesses to authenticate and verify payments in real-time, making payments more secure and efficient. Overall, authentication and verification processes are becoming increasingly important to ensure that payments are secure and safe. In India, the implementation of UPI has made authentication and verification processes more secure and efficient, helping businesses improve the overall customer experience and reduce the risk of fraud. India's payment system has drastically improved over the years due to the implementation of authentication and verification processes. The Indian government has taken initiatives to ensure that payments are made securely and efficiently.

Authentication and verification processes are essential for any financial transaction. The government has put in place the necessary measures to ensure that payments are secure, and that fraud is minimized. Authentication is the process of verifying the identity of the sender or receiver of funds. This is done by verifying the sender's identity through biometrics and other identification methods like PAN card, Aadhaar card, fingerprint scanning, etc. However, the sender provides details and then verifies against a database to ensure that the funds are sent to the right person. Verification is the process of ensuring that the funds are being used for the intended purpose. In addition, these sources are used to verify the funds. It helps to ensure that the funds are used for the proper purpose that is used wisely. The government has made sure that these processes are in place to ensure the safety and security of payments in India.

Figure 1: Verification process of using online platforms.



Source: Agpaytech Research (Getid.com)

## Methods to build user trust in payment gateway.

Trust is the foundation of any successful business and is essential for payment gateways. A payment gateway is an online platform used to process payments for online purchases, and it's essential for any business that wants to accept payments online. Trust is a significant factor in a customer's decision to use a particular payment gateway. If customers don't trust the payment gateway, they won't use it. Businesses must build trust with their customers when using a payment gateway. There are several ways to build trust with your customers using a payment gateway.





- Make sure the payment gateway is **secure**. Security is a crucial factor in building trust with customers. Ensure that your payment gateway is secure and has the latest security measures. It will help reassure customers that their payments are safe and secure.



- Be **transparent**. Be upfront and honest about what information is being collected and how it's used. Make sure customers understand when they agree to use the payment gateway.



- Offer **customer support**. If customers have questions or concerns about their payments, make sure you have a customer support team to help. It will show customers that you care about their experience and are willing to help them if they have any issues.



- Use an **established payment gateway**. Using established payment gateway providers such as PayPal or Stripe will help build trust with customers. These payment gateways are well-known and trusted by many customers, so using one will help to reassure customers that their payments are safe and secure.



- Offer **customer testimonials**. Customer testimonials are a great way to show customers that others have had positive experiences with your payment gateway. You can include testimonials on your website or print materials to show customers that your payment gateway is trustworthy.

## The regulatory framework between payment aggregators and gateways

Payment aggregators and gateways have revolutionized how we transact online. The Indian government has developed a comprehensive regulatory framework to govern the activities of payment aggregators and gateways. A payment aggregator or gateway is a third-party service provider that enables online merchants to accept customer payments through various payment options. It

is an intermediary between the customers, merchants, and payment networks. Payment aggregators and gateways provide a secure online payment platform by providing encryption and fraud detection services.

Figure 2: How fraud detection works



Source: Agpaytech Research (spiceworks.com)

The Reserve Bank of India (RBI) is the primary regulator of payment aggregators and gateways in India. The RBI has issued a set of guidelines and regulations that govern the activities of payment aggregators and gateways. These regulations aim to ensure the security and reliability of the payment system in India. The RBI has mandated that all payment aggregators and gateways register themselves with the RBI before starting operations. Here are some point which needs to be followed by the payment gateways.



- The guidelines are created for the entity's involvement in the handling of funds. Consequently, payment gateways have been limited to entities that provide technology infrastructure to route and facilitate the processing of an online payment transaction without any involvement in handling funds.
- RBI has also mandated payment aggregators adopt the technology-related recommendations in the guidelines.
- Payment aggregators must enter into direct agreements with all merchants, acquiring banks and other stakeholders.
- Payment aggregators will need to have a Board approved policy for disposal of complaints/ dispute resolution mechanism/ timelines for processing refunds etc., as per the RBI instructions on Turn Around Time for resolution of failed transactions.
- Payment aggregators must appoint a nodal officer responsible for regulatory and customer grievance handling functions.
- Payment aggregators are to check the Payment Card Industry-Data Security Standard (PCI-DSS) and Payment Application-Data Security Standard (PA-DSS) compliance of the infrastructure of each of the merchants on-boarded.

Furthermore, payment aggregators and gateways must ensure adherence to the Know Your Customer (KYC) guidelines issued by the RBI. In addition, the guidelines issued by the RBI, the Indian government, and the Payment and Settlement Systems Act, 2007. This act mandates that all payment aggregators and gateways must adhere to strict guidelines to ensure the safety of customer data and the reliability of the payment system. The Indian government has also issued the Information Technology Act 2000, which provides the legal framework for the protection of customer data. This act mandates that all payment aggregators and gateways must ensure the security and privacy of customer data.

## Conclusion

India is very fast to adapt technology in every phase of the industry. Most people depend on online payments or use payment gateway to transfer transactions. To protect consumer interests, the Reserve Bank of India has issued guidelines to regulate payment aggregators and gateways. The guidelines have taken effect from 1 April 2020, and stipulate a registration requirement and eligibility criteria for aggregators, along with several other compliances concerning local incorporation, governance, security and anti-money laundering measures. Payment aggregator to provide the mechanism for handling the cyber security risk, anti-money laundering etc.



# 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 White-Label Solution, 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](http://www.agpaytech.co.uk)

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