



# Payment Gateways **The Bridges of Modern-Day Commerce**

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# Introduction



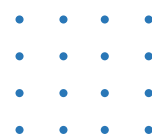
Recall the last time you shopped something, booked a cab, ordered a pizza or paid an electricity bill. Could you have done that without the unbelievable and seamless ease, fluidity and speed of a payment gateway? If there was even an iota of friction or possibility of delay, chances are that you would have hopped off that bus right away.

That explains how much of an imperative the payment experience is for any business today. It is an experience that is elevated by the nexus of solid software, fluid interoperability handshakes among various entities and the assurance of security without compromising speed. If any of these three factors is missing, a customer/user will switch to something else in a matter of seconds. Payment gateways edify these factors and deliver a cohesive experience that ensures business growth, profitability and customer delight.

A payment gateway, essentially, enables a business to facilitate transactions by giving secure interfaces for collection of money through the customer's preferred bank – with solid security, compliance and satisfactory levels of speed. A well-built and strong gateway supports data transfer for transactions between the bank and the payment portal.

With a sound gateway, you can create a smooth passage of such transactions by encrypting confidential data and transferring them between a buyer, an online shop, and a bank. There is a payment portal, a payment processor (bank or any BFSI entity) and a gateway that establishes communication between the three participants of the payment process. In short, this gateway ensures that when a customer is ready with a shopping cart, there is no glitch in completing that transaction. The gateway is there to make sure that s/he walks away – happy with a smooth, happy and lightning-speed experience.

And that's why it is impossible to conceive of running a business in today's always-on and well-lubricated digital age – without a strong payment gateway.





# Growth and Potential

Payment gateways are turning into underpinnings for a lot of enterprises and for a multitude of reasons. They are witnessing explosive growth and slated for a robust curve in the coming few years. With the intersection of smart-phone explosion, API burst, FinTech and e-commerce – they are bound for exponential strength and scale ahead.

At the last count, the payment gateway market was estimated at USD 17.2 billion in 2020, and expected to reach USD 42.9 billion by 2026, as per Mordor Intelligence. According to Grand View Research's reckoning, this space can be seen touching USD 87.44 billion by 2028.

**Spurt in online transactions**– that got a never-before fillip during the pandemic. According to a study by ASSOCHAM-RNCOS, mobile wallet transactions can easily cross INR 275 trillion by 2022 in India.

**Strong mobility** across regions and customer segments. For instance, GSMA notes that mobile internet penetration in Asia will hit a 62 per cent rate in 2025. This is also leading to a surge in e-commerce purchases.

**Adjacent support from technologies** like IoT and AI for automation and acceleration of transaction experience

**Comfort, familiarity and heightened adoption towards use of debit or credit card** across the developed and developing countries

**Evolution of standards and regulatory frameworks** like the PCI DSS 3.2.1 version (to reduce credit card fraud and increase control over online payment security)

**Jump in technology adoption by small and medium enterprises** as they restructure their revenue strategies and businesses

**Regulation clarity** from Reserve Bank of India (RBI) for gateways such as Bharat Bill Pay, Paytm, and Mobikwik. Ex- The RBI's March 2020 guidelines on Payment Aggregators (PAs) and Payment Gateways (PGs)

**Government initiatives to boost digital economy** like Demonetisation, the Digital India program and UPI

**Spikes in specific verticals** like the retail and e-commerce segments. They led the market and accounted for more than 26.0% share of the global revenue in 2020. And a major chunk of the segment growth was thanks to the rising number of online transactions



## Do You Need One?



Any business in today's digital era 'has to have' a mechanism to make sure that its customers do not drift off at the last mile of making a purchase decision. If you are a large merchant or a business with a huge turnover – it is absolutely vital to control this aspect of customer experience – else you can suffer long-lasting damages. Even for facilitators and other ecosystem players (like billing companies, payment providers, BFSI entities, IT companies and interface-players) it is very necessary to have a good grip on this aspect of business. Making it your strength can translate into business profitability, loyal customers and happy clients besides a host of new revenue opportunities that can be tapped ahead. Contrary to this – Letting it stay as a weakness or an over-looked area can make you lose customers, business, market confidence and network-effects.

# Challenges

While a payment gateway may be an inevitable investment for a business, it is not a simple and plug-and-play decision. There are a lot of issues that can emerge during development, deployment, operation and management of a payment gateway – and some of them can translate in a formidable way towards defining the big clincher of ‘customer experience’.

**Here are some aspects that can add wrinkles to a payment gateway:**



- **Security** – the merchant or business is always worried about taking care of customer data, card information and compliance issues. With a new malware of hack popping its head every few days, this is like feeding a monster on a constant basis. One small slip can cost a lot – in brand image, customer loyalty and hefty fines. That's why it is crucial to create secure networks, access control measures, vulnerability management mechanisms, a solid information security policy and risk mitigation initiatives.
- **Cross-border and cross-player gaps** – Many gateways still struggle with travelling in a seamless way across various merchants, payment formats, currencies, financial players or countries. This can add delay, fatigue and dead-ends to the payment pipeline.
- **Financial cost** – of development, of integration, of fees, of credit risks, of mandates, and of correspondent networks
- **Constant struggle to enhance customer experience** – it's like juggling many balls like convenience, simplicity, speed, fluidity and choice – all at once.

# Salient Factors for a Strong Payment Gateway

In light of the expectations from, and challenges inherent in, it is important to consider some vital elements of a payment gateway. After all, no enterprise would want to find itself left out in the race to 'wow' its customers in the extremely-competitive business environment of present times. And having a sloppy, or slow, payment experience can push away even a customer who is happy or almost-there with your product/service. That makes it important to weigh in some crucial areas that can define the effectiveness of a payment gateway in a big way.

- Attention to data safety and compliance needs
- Adequate scope for customization as per some unique needs, context and future business strategy
- Ability to integrate advanced level of technology or sophisticated elements like analytics, a fresh front-end, CRM, AI as add-ons
- Cost effective development and lightweight maintenance
- In-built adaptability for embracing potential revenue opportunities
- Readiness to add new segments, regions, currencies or customers in the core gateway
- Confidence with building a strong infrastructure
- Capability to create a solution for a long-term strength – something that can handle business scale-up and scale-down as and when needed
- Smooth integration with payment processor for end-to-end speed and pathways
- Sound API documentation and implementation – necessary for regulatory and industry factors
- Interfaces for CRM and compliance – to augment and tie in the system to other processes and imperatives
- Robust tokenization – so that there is no need to store sensitive data and worry about penalties
- Adherence to important mandates and guidelines (PCI-DSS, EMV etc.)
- Fail-proof security and fraud-control mechanisms – not just incident-management but proactive control
- Well-laid out dispute resolution approaches and tools
- Access and API sharing that helps expanding across banks, processors, and providers
- Easy and reliable customer support for delivering holistic experiences and swift corrective action



# A Walk-through

## Here's a quick snap-shot of a well-mapped journey of building an effective payment gateway:

### Setting up infrastructure

This covers the option of hosting on the third-party server or preparing the server on your own. We can deliver efficiencies with both the options depending on your need of power, control of data and data-sovereignty areas.

### Integrating with a payment processor

Here we connect the underlying path with a processor - a company or financial institution that processes online transactions, a bank or a payment system, such as Visa, Mastercard, AmEx, etc. This needs capabilities on API documentation and the ability to develop an external API for the business's clients. This part allows the enterprises for processing and receive the payment statuses back.

### Developing CRM

This step is useful for preserving client data, managing transactions, and controlling managers while it also equips a business to drill into real-time insights. A gateway welded well with the CRM of a company gives extra advantages of sharp forecasting and opportunities for up-selling, cross-selling and revenue-maximisation.

### Implementing tokenization

Here the credit card data will be kept on the gateway side rather than on the e-commerce store's server. This step can liberate merchants from storing sensitive data during recurring charges. By turning buyer's card number as a token, to be used for transaction processing- one can avert many security mishaps and align well with regulatory needs. This process will need expertise on setting up hardware, on card data encryption and on the confidence to comply with PA-DSS rules - The Payment Application Data Security Standard created by the Payment Card Industry Security Standards.

### Getting necessary permissions and certifications

Like the 3DS certificate from EMVCo (EMV stands for Europay + MasterCard + VISA and is an international standard for bank card transactions with a chip). The certificate would entail work for getting an EMVCo Product Provider Registration Number, signing a quotation to open access to a lab's 3DS test platform, getting a formal approval of test results, getting confirmation from EMVCo and completing the procedure for certificate and license.

### Taking care of all compliance areas

Online transactions are subject to many frauds, security attacks and constantly-evolving threat-vectors. So there is a strong need and mandate to comply with requisite standards. Like the PCI DSS standard (The Payment Card Industry Data Security Standard) which aims to reduce fraud by outlining obligatory rules for the software that works with credit cards. Companies are divided into specific levels depending on the transaction volume. An approval pre-necessitates the PCI audit.

### Integration

This has to be done with many processors and making the gateway flexible and adaptive. This ensures that the payment gateway is able to work with many parts of the overall ecosystem. Giving accessible APIs makes this part easy as other players can also create easy interfaces and work jointly - so that from the customer's side it is always a seamless and cohesive experience.

Putting in place dispute resolution interface and ready systems for customer support and trouble-shooting.



## Conclusion:

Building a robust payment gateway needs both tools and expertise. Seasoned solution-experts like Staquo have an end-to-end capability in this areas. They have teams, tools and project experiences that ensure that the final payment gateway does not miss out any of the areas mentioned above. This becomes possible due to Staquo's wall-to-wall expertise in the area of payment gateways and a versatile range of successful projects.

From smooth integration to compliance to business-maximisation – Staquo packs the entire spectrum of a successful and profitable payment gateway. With our battle-tested expertise and technology-confidence, you can be sure that your payment gateway is not a cost-centre but a revenue-magnet that adds more depth and impact to every customer experience – thus creating a positive domino-effect on overall business growth.

Payment gateways are indispensable for any business's very existence today. When done right, they can expand a business's scale, footprint, revenue-potential and customer loyalty-quotient in staggering ways. At the same time, a small blip – like a delay, a security red-flag or a poor UI/UX aspect – can derail the whole equation between you and your customers. So start investing serious time and attention in developing, managing and optimizing your payment gateways. Partner with apt experts like Staquo who bring in experience-backed competence to arm you better here. They will make sure that your gateways have the right door-bells, locks and smooth door-knobs.

Start investing in a payment gateway that is a strong and smooth bridge. Let your partners build something that connects you in a fast and safe way to customer satisfaction and growth. It's time to step ahead into the direction of new possibilities.





For more questions on Staqa Insight and other products and services, we are always eager to listen, help, and talk – reach out to us at: [contactus@staqa.com](mailto:contactus@staqa.com).

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