Integrating a Payment Gateway into the Website

A Practical Plan for E-Payment Enablement

What is a Payment Gateway?

- Allows websites to accept credit/debit and online payments
- Acts as the middleman between the customer and the merchant bank
- Handles:
- Payment processing
- Confirmation to user and merchant
- Card authentication

Elaboration:

- A payment gateway allows your website to accept credit/debit card payments, online payments from customers.

- The payment gateway processes the customer's credit/debit card information by sending the data to the gateway's web server, which then makes the sale and sends the confirmation back to the website.

- Payment gateways cost money and charge per transactions, and there are a lot of them to choose from.

- Picking the right gateway can help save you money and keep your business running smoothly.

- Once you've chosen your payment gateway, integrating it into your website software is a snap.

How It Works – Interfaces Involved

- **Customer Interface** – Where payment is initiated
- **Gateway Server Interface** – Processes & authenticates payment
- **Client Bank Interface** – Verifies funds and authorizes
- **Merchant Interface** – Receives confirmation
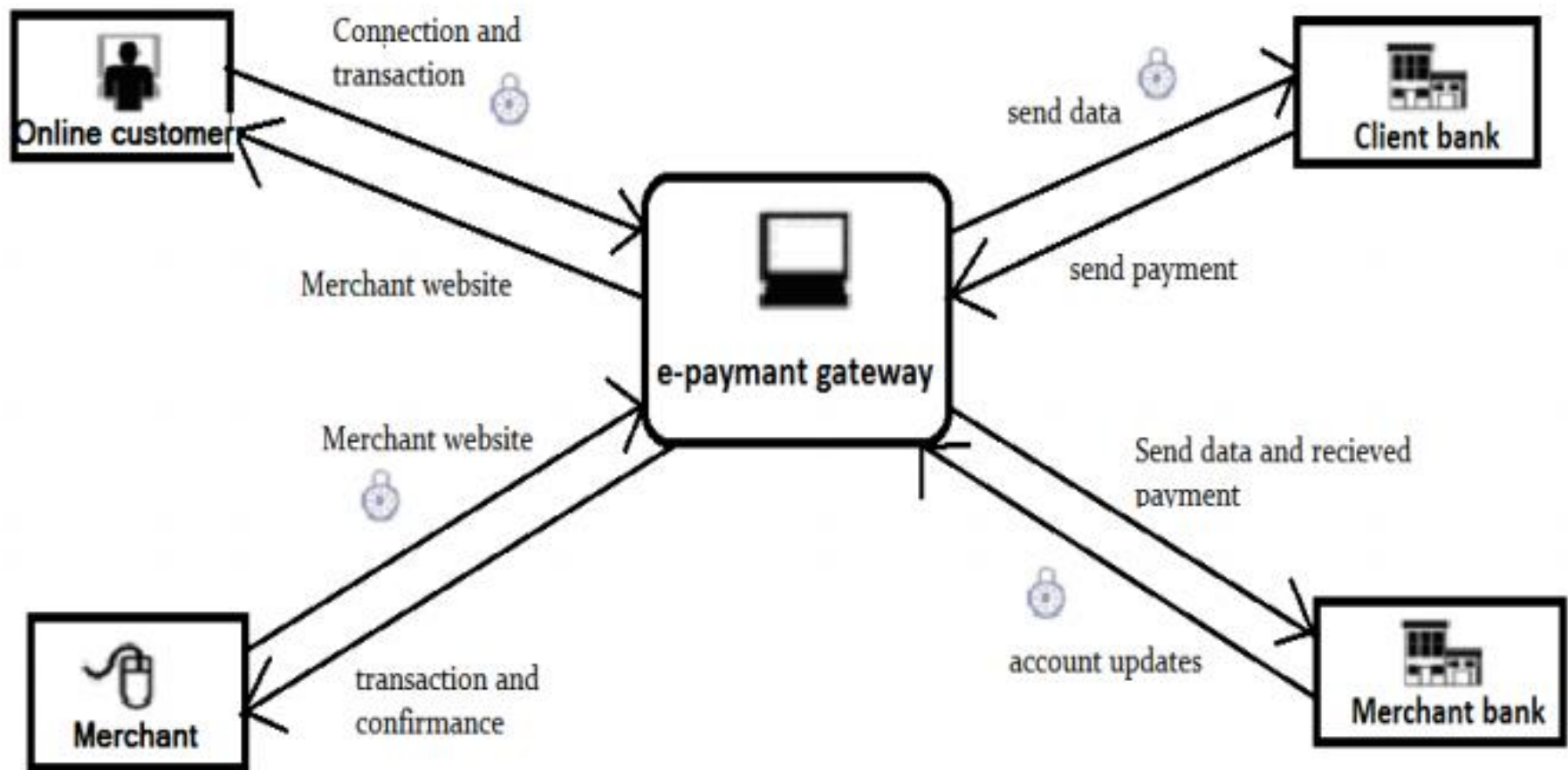- **Merchant Bank Interface** – Records transaction

Fig. 1 Proposed Gateway Network

- **Customer interface-**

This interface is the page visible to the customer who is going to make payment. This provides the connection between customer and e-payment gateway.

- **Server (e-payment Gateway) Interface -**

This page is displayed to the customer where he can update all the bank details (also checks authenticity of the details updated with the customer bank)

- **Client bank interface-**

Gateway will connect to the bank and check whether the the bank balance of the customer is enough to buy the product and send back the payment to the server gateway

- **Merchant Interface-**

Receive confirmation and transaction details on merchant website/ refund

- **Merchant Bank Interface-**

Record of received and sent payment (trial balance)

Integrating the Payment Gateway into the Web Shop

- **Setting up the web shop**, use third-party software(word press) to create a web shop for the customers. This software handles the creation of the ordering page as well as all the code for transferring payment information to the gateway.

- **Add payment methods**, the process for this will vary from service to service, but generally you will need to enter your payment gateway information for each method of payment you intend to accept (Visa, Mastercard, etc.). Your payment gateway determines which cards are accepted.

- **Test the gateway,** you will typically be provided Test or Sandbox accounts by your payment gateway service. These allow you to perform fake transactions to ensure that the payment process is working correctly. Be sure to test before making your store live.

Choosing the Right Payment Gateway

- **Options**: -
- BHIM UPI
- Paypal
- Western Union
- Amazon Pay
- Paytm
- Types:
- **Direct (Transparent):** User stays on site
- **External (Redirect):** User is sent to another site
- Recommendation: Use **Direct Gateway** for professionalism

Elaborated:

- Your website software provider may provide payment gateway services that you can quickly implement on your suite.

- Some of the more widely supported gateways include: PayPal, Amazon Pay, SecurePay.

- **External gateways** ("redirect") send your customers to another website to process the payment. **Direct gateways** ("transparent") do the processing within your website, keeping the customer on your site. I suggest to choose a **direct gateway,** as they look more professional.

- You will need to sign up for a merchant account, which you then link to your payment gateway. This will allow you to receive payments from the customer. Merchant accounts will typically charge you per transaction as well.

- Once you sign up for your gateway, you will be provided the necessary information that you will need to provide to your website software. (Credentials)

Fee structures (payment Gateway)

The payment gateway will typically charge you a one-time setup fee, a monthly fee, and then charge a small fee for each transaction processed. Compare rates to find the service that meets your needs the best. For ex:

- **Amazon Pay fee structure**
- Amazon Payment charges per transaction and separately applies a domestic processing fee of 2.9% plus $0.30 for an authorization fee. When the purchase is cleared and processed, the tax is charged where applicable.

- **PayPal Express Checkout fee structure**
- 2.4% to 3.4% (depending on the sale's volume) + $0.30 per transaction
- No setup fees

- **Stripe fee structure**
- 2.9% + $0.30 per transaction. Additional 1% is applied to international cards.

Fee Structure Comparison

Gateway	Transaction Fee	Setup/Maintenance	Notes
PayPal	2.4%–3.4% + $0.30	No Setup Fees	Varies with volume
Stripe	2.9% + $0.30 + 1% (Int. cards)	No Setup Fees	Currency conversion charges
Amazon Pay	2.9% + $0.30 + taxes	No Setup Fees	Domestic processing fees apply

Integration with Website (Word Press)

- Use WooCommerce or other plugins
- Add payment gateway credentials (API keys, etc.)
- Configure accepted cards (Visa, MasterCard, etc.)
- Add PayPal "Buy Now" button
- Ensure test/sandbox mode is enabled before going live

Testing the Payment Flow

- Use sandbox/test accounts provided by gateways

- Test scenarios:

- Successful payment

- Failed authentication

- Refund process

- Check for confirmation emails and backend logging

Technical & Common Issues

- Page reset during payment

- Payment blocked or stuck

- Money deducted, no confirmation

- Backend/server issues

- Credential errors

Refund Policy & User Support

- Refunds offered for rejected items (excluding journal charges)
- Support issues:
- Declined transactions
- Wrong input
- Missing confirmations

Tasks

- **Actions:**
- Register on PayPal
- Add widget/button on WordPress
- **Team:**
- Finalize gateway
- Test and go live

PayPal features

- PayPal Payment gateway Service charges are:Annual maintenance Charge: Free, Zero maintenance charges.

- Transaction Fee per Transaction: 4.4% + US$0.30 + Currency conversions charges

https://www.brandloom.com/10-best-payment-gateways-in-india (source)

Thank You