

Comparative study of different payment Gateway

Monika Verma, Prof.Pankaj Jagtap

Abstract— These Payment gateway is the access point of online Banking network. All online transaction passes through payment gateway for processed. The payment gateway act as a bridge between the user's website and financial institution that process the transaction of the gateways process the different transactions between user and web browser. The payment gateway route and authenticate payment. Most of the population doesn't trust on the local existing online payment gateway because it is not very secure. Mostly people want to adopt electronic payment system as it has lots of advantages. They need such a gateway that fulfill their all requirement and provide security privacy etc. In this paper we have focused on different payment gateway and also deep comparative study, analysis of different online gateways.

Index Terms— Payment Gateway, CCavenue gateway, Direct pay gateway, EBS gateway, HDFC Gateway, ICIC pay-Seal Gateway, Transecte Gateway

1 INTRODUCTION

A payment gateway is a merchant service provided by an e-commerce application service provider that authorizes credit card or direct payments processing for e-businesses, online retailers, bricks and clicks, or traditional brick and mortar. The Gateway is called as Trusted Third Party or Entry point to any network. Used in E-commerce system for more secure transaction. Online shopping allows customers to sit in their homes and buy goods from all over the world. Similarly allow Merchant to sell their products to all over the world from home. Most of the population will use online payment in near future. Most of the Third world (Developing & undeveloped) countries lagged behind in making a good Internet architecture. There is need of a secure online payment gateway in developing countries. It also mentioned the requirement for an electronic payment gateway from customer and merchant's point of view. And on the basis of these facts and figures a new secure payment gateway has been designed and developed. The payment gateway would provide secure transactions. On the basis of proposed architecture of e-payment system of third world countries and the requirements related to any electronic payment gateway, we design and develop a Secure, reliable and efficient electronic payment gateway. Electronic payment systems securely process such payments and can be implemented by merchants themselves on their own web servers or alternatively, they can be provided to merchants by third party e-payment service providers. This seminar report describes the mode of operation of a broad range of e-payment systems available today in order to provide a comparative evaluation of their advantages and disadvantages.

Comparison of Different Payment Gateway

In this paper we have described comparative study of different payment system. The criteria those are important while evaluating a payment gateway. Different criteria and services described the comparative study of payment gateways. All Payment gateways focus on different factors as cost, security, support, dispute resolution, international payments, transaction time, supported banks and tools and features.

In this paper we have describe comparative study of different

payment system.

1. PayPal Gateway
2. Ccavenue Gateway
3. Direct Pay gateway
4. EBS Gateway
5. HDFC Gateway
6. ICIC pay seal Gateway
7. Transecte Gateway

Paypal Gateway :-

PayPal Holdings, Inc. is an American company operating a worldwide online payments system that supports online money transfers and serve alternative traditional method like checks and money order. PayPal is one of the world's largest internet payment companies.

Security:-

- a) Dual privacy
- b) Security key system use
- c) Data Encryption
- d) Transaction monitoring
- e) Its too safe and faster

Cost: - PayPal is free and protect our purchase.

Customer care and support:- may online support, multicurrency support ,PayPal merchant technical support is ready to assist with integrating PayPal on website

Processing through international payment: - it may support visa, MasterCard, American express.

Transaction time: - it's too fast and safe. This is taking less the week to process a check.

Support multiple banks: - may support banks HDFC Bank, ICIC Bank, SBI, Canara bank, Union Bank, and BOI.

Features: - it may accepted only credit care no accepted debit card, currency conversation fee add 2.5% added to exchange.[2]

CCAvenue gateway:-

CCAvenue is a leading Payment Gateway Service Provider, authorized by Indian financial institutions, to appoint Sub Merchants. This enables ecommerce websites to sell products and services online, and accept payments in real time.

Security:-

- a) Its uses security firewall.
- b) Manage of risk.
- c) Fraud may filter by its.

Cost: - its cost is 7500 which is nonrefundable to use, 7% is transaction charge for cards, net banking charge will be 4% +1200 maintenance charges.

Customer care and support: - it supports real time transaction support, technical support and support net banking, support 24*7.

Processing through international payment: - it may supports visa, MasterCard, American express, diner's club jsb cards.

Transaction time:- it takes 30 minute for a transaction perform.

Support multiple banks: - may support banks HDFC Bank, ICIC Bank, SBI, Canara bank, Union Bank, PNB, and HDFC.

Features:- it may accepted only credit care no accepted debit card, and additional feature live chat, shopping, cart ready, SMS, email.[3]

Directpay Gateway:-

Direct pay is among the largest solutions service providers in India .we are revolutionary bank –neutral payment processor for online merchant in India. its services offer cost effective solutions, various payment acceptance modes and a secure, robust technology.

Security:-

- a) Its verify by visa and master card secure code.
- b) it used secure socket layer (SSL technology used)
- c) Inbuilt fraud detection.
- d) Secure data encryption.
- e) PCI certified, protect of customer data exchanged online.

Cost: - one time set up cost will be 10,000 to 30,000 or transaction cost up to 6% or May varies.

Customer care and support: - it support multi currency, quick settlement, simple integration, service support cost effective.

Processing through international payment: - this may support visa master cad and diner card.

Transaction time:-it give transaction status gives response back by message alert. fast and secure transaction data.

Support multiple bank:-ICIC, HDFC, Citibank, state bank of India.

Feature: - one gateway of multiple payment. multiple access mode. around 51 debit card accepted. online shopping travel educational institution equity broking.[4]

EBS Gateway:-

EBS is owned by France based ingenue group, which is global leader in payment processing service .the reviews of this gateway is mixed. Some of profit books customer are haply

using it. E-Billing Solutions (EBS) provides a consultative approach to Indian Merchants for facilitating suitable online payment solutions and benefit from the exponential growth witnessed in E-commerce.

Security:-

- a) Its continuously monitoring risk.
- b) Highest security 1.1 PCI DSS.
- c) 128 bit SSL technology used
- d) Used security firewall.
- e) Verified by visa and MasterCard secure code

enabled gateway.

Cost: -one time set up cost will be 3,000 to 6,000 or transaction cost up to 3.25 % or May varies.

Customer care and support: - this gateway may risk detection, and excellent technical transaction support services, risk monitoring on an ongoing and basis, smooth multiple payment option.

Processing through international payment:- this may support visa master cad and DINERS CARD, its card.

Transaction time: - the transaction may perform on real time; transaction time may between 3 to 7 second.

Support multiple banks:-ICIC. HDFC. AXIX, state bank of India. Indian overseas bank. corporation bank.

Feature: - no debit card is accepted, supported credit and net banking.[5]

HDFC Gateway:-

HDFC Bank is a World-Class Indian Bank. HDFC Bank Payment Gateway provides a single platform to support multiple payment technologies this payment gateway support VISA Card. Debit Credit card. HDFC Bank Payment Gateway also provides secure browser-based access for real time transaction monitoring and reports download. This payment gateway provides integrated flexible rules. HDFC Bank's business is based on four core values - Operational Excellence. Customer Focus. Product Leadership and People. HDFC Payment Gateway provides 24 hour customer support and offering 99.9% uptime.

Security:-

- a) Intrusion detection and prevention system.
- b) Set certificated for dual signature.
- c) VeriSign 128 bit SSL technology used
- d) Used security firewall

Cost: - one time set up cost will be 10,000 to 50,000 or transaction cost up to 3.5 % to 6% or may vary. Security deposit: 50000 depend on diligence.

Customer care and support: - this gateway may risk detection, and excellent technical transaction support services, risk monitoring on an ongoing and basis, smooth multiple payment option. This may support user friendly full backend 24 hours supported, and manage in real time. .

Processing through international payment: - visa, MasterCard, HDFC, net banking.

Transaction time: - the transaction may easy and secured, real time basis it response time.

Support multiple banks:-its only support HDFC single payment gateway to provide a single platform for multiple payment technology.

Feature:- its support 15 international currency. support credit card and HDFC net banking, debit card accepted, this may supported email and also

Telephonic support is also available. [6]

ICIC Pay seal Gateway:-

The ICICI Payment Gateway offers a complete technology and banking solution for your business online payment requirements. ICICI Payment Gateway offers 128-bit SSL encryption. It is easy to install, easy to operate and manageable. This payment gateway is very flexible you can customize and integrate to your platform. ICICI Payment Gateway provides real-time solution on a reliable internet payment system.

Security: -

- a) its offer 128 bit SSL encryption.
- b) 228 bit RSA before passing through an SSL pipe using 128 bit.

c) Extensive security firewall.

d) Its offer higher success rate all the players.

Cost: - one time set up cost will be 35000 or transaction cost up to 5% or may varies.

Customer care and support: - this gateway may optimum server utilization, centralized and secure data, highly reliable and scalable support.

Processing through international payment: - this may support visa MasterCard and net banking.

Transaction time: - the transaction may easy and secured, real time basis it response time. it takes 10-15 second for performed the transaction.

Support multiple banks:-its only support ICIC single platform for multiple payment gateway.

Feature: - it support credit card, ICIC net banking, needs java support to our website. [7]

Transecute Gateway:-

The Transecute Payment Gateway allows your website to securely accept credit cards in real time. Transecute is suitable for all small and big businesses no matter what size of business you have. transecute welcome to all type of business, Transecute expert is available 24 hrs for guideline.

Security:-

- a) End to end security.
- b) Fraud detection and risk mitigation.
- c) Used 128 bit SSL certificate.
- d) Used symmetric key based checksum algorithm

Cost: - one time set up cost will be 30,000 or transaction cost up to 5% or may varies. Charge back up 10 per transaction.

Customer care and support: - this gateway may support transaction, multi currency, and technical support all time. Instant fraud alert and mails for risky transaction

Processing through international payment:- Visa, MasterCard . Transaction time: - it takes less than one hours and real time credit card response.

Support multiple banks: - its provide a single platform for multiple payment gateways. no bank payment accepted.

Feature: - it supports any time withdraw your balance. no debit card accepted, it supported all visa and master card transaction. [8]

Table of comparison with various countries

In this table shown the different criteria like cost availability security & time

	Time	cost	availability	security
USA	Low	medium	High	High
China	Medium	Low	Low	Low
Turkey	High	High	Low	Low
Africa	Medium	High	Low	High
Nepal	High	Medium	Low	Low
Propose-system	Low	Low	High	High

Table:-TABLE OF COMPARISON

- **Time:** Time of transaction
- **Cost:** E-gateway's charges per transaction.
- **Availability:** The degree to which gateway is operable
- **Security:** Overall security related to electronic Gateway

Analysis:-

In below graph the different factor of like security, cost, customer care support, processing through international payment, real time transaction, support of multiple bank shown in below graph. Through easily understand which is better for customer or user.

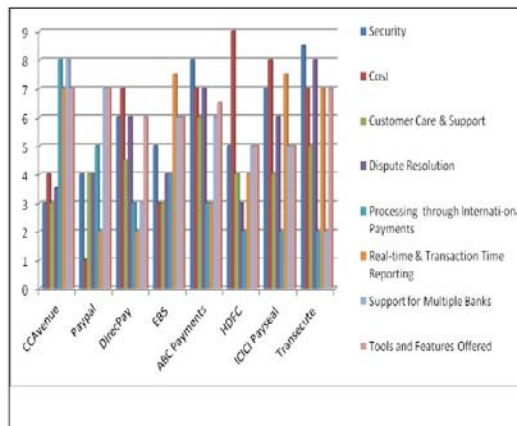


Figure2:-GRAPHICAL REPRESENTATION

The below graph shown overall ranking of different payment gateway which is most popularly use and security

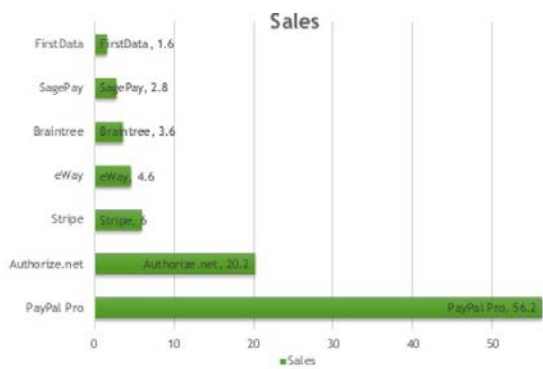


Fig:-2 BEST GATEWAY USE IN SEALS

CONCLUSION

In above observation and study of different payment gateway user may easily understand which better gateway for use. The paper may give better level to understand of different gateway from different parameter. Through analysis graph is easily understand to user and customer difference of different payment gateway. Because yet time no one knowledge about to payment gateway and which is reliable and overall performance. Because it is necessary in payment system that should be privacy and trusty reliable in payment like bank account and there should be identify the customer bank accounts and the merchant account.

Acknowledgment

I acknowledge my guide Mr.Pankaj jagtap who has provided meher view in the selection of topic.

REFERENCES

- [1] Anuja Pande, Prof. A.B. Deshmukh, Prof.M. D. Tambakhe –“E-payment Gateway Model”
- [2] [Online] <http://www.payple.com>
- [3] [Online] available: <http://www.ccavenue.com>
- [4] Direct Pay, [Online] Available: [http://www. Time-sof-money. Com/direct pay/jsp/home.jsp](http://www.Time-sof-money.Com/directpay/jsp/home.jsp)
- [5] [Online] Available: <http://EBS www.ebs.in/why-ebs.php>
- [6] Online available: <http://www.hdfc.com>
- [7] [Online] Available: <http:// www.icicibank.com>
- [8] Online available: <http://www.transecute.com>
- [9] Case Study of e commerce payment system, [online]

<http://www.scribd.com/doc/14817254>.

[10] [Online] Available: <http:// www.creditcard-payment>

[11] [Online] available: <http://icicgateway.com>, <http://www.payseal.com>

[12] Ailya Izhar, Aihab Khan, Malik Sikandar, Hayat khiyal, Wajeeh javed, Shiraz baig, " Designing And Implementation Of Electronic Payment Gateway For Developing Countries Journal of theoretical and applied information technology".

[13] Anuja Pande, Prof. A.B. Deshmukh, Prof.M. D. Tambakhe –“E-payment Gateway Model”