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Payment Facilitators and Their Role in Online E-Commerce Transactions

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Abstract: Electronic Commerce has revolutioned the entire way business is conducted and is being used in almost every sphere of activity. The true essence of electronic commerce stems from electronic payments- the facility to make and receive payments online. While customers crave for a variety of payment options, merchants manage to live up to the expectations, thanks to third-party payment service providers (PSPs), what the industry calls Payment Facilitators. A payment facilitator is an entity that acts as a seamless, integrated digital payment acceptance platform which receives customer payments on behalf of merchants. This relieves merchants from the burden of handling payments, along with a host of technical infrastructure, risk management and regulatory obligations. The current work provides a behind-the-curtain scenario of retail online payments and explains how a payment facilitator is the simplest way for online merchants to accept payments from their customers. Payment facilitators have yielded a new business model, which renders tremendous benefits to online businesses- both in terms of technology and procedures. All such benefits are visited.

Keywords: Payment facilitator, payment gateway, electronic payment system, online merchant, issuer, acquirer, transaction, m-wallet, MID, sub-merchant.

I. Introduction

As per the International Journal of E-Commerce, 'electronic commerce is sharing business information,maintaining business relationships and conducting business transactions by means of telecommunications networks'. Electronic commerce is growing very fast at more than 20% a year, bringing about extraordinary changes to markets, industries, individual businesses and society as a whole[1]. In the 2016-17 fiscal, the online market in India had grown by 19 percent[2]. Many offline brick and mortar companies(i.e not having an online presence) are slowly moving to online business and those who are not in online commerce business will be forced to come online[3]. Most commerce will be e-commerce by the year 2050[4].

In order to set up and run an e-commerce business efficiently and effectively, there are certain basic requirements. Apart from a robust and user friendly web application, a vast product database and an efficient delivery system, providing a secure and efficient means of payment to the customer has popped up as the prime requirement for any e-commerce business. The most important part in an e-commerce transaction is, of course, the payment. The New York Times wrote in 2017, "As an e-commerce merchant, cash and checks aren't your bread and butter but electronic payment methods are"[5]. The benefits of electronic payment systems are manifold, both for consumers as well as the sellers. Hence online businesses need to offer their customers a diverse range of electronic payment methods. Modes of electronic payment can vary from the most traditional, credit cards, to the fast growing m- wallets, encompassing in-between debit cards, internet banking and mobile banking.

This work introduces the concept of payment facilitators and highlights their role in online payment transactions. The following section underlines the existing mechanism of a typical online payment transaction by describing the various parties involved. This is followed by narrating an illustrative scenario that emphasizes the need of a third party entity in an online payment process. The subsequent section on 'Working Methodology' introduces a payment facilitator and describes its functioning along with its various benefits. In the last section, I discuss how the trend has shifted to payment facilitators as they absolve online businesses of burdensome regulatory obligations, thereby allowing them to focus on their core business functionality.

II. Existing Mechanism

In any online payment transaction, there are essentially four parties involved:

1. Merchant or seller
2. Customer/consumer or buyer
3. Issuer or Issuing Bank

4. Acquirer or Acquiring Bank

5. Payment Gateway

Merchant: It is the party that actually does business by selling some goods or services to consumers online.

Customer: It is the party that buys the goods/services sold by the merchant.

Issuer: It is the bank where the customer maintains his/her account. Pertinently the same account is used to pay the merchant for the goods purchased by the customer. In case the customer possesses a credit/debit card, the same has been issued by the issuer.

Acquirer: It is the bank where the merchant maintains his account.Pertinently the same account is used to receive the payment from the customer. In case the merchant possesses a point of sale (POS) terminal also called by some as a swipe machine, the same has been installed by the acquirer.It is absolutely normal if both the issuer and the acquirer happen to be the same bank.

Payment gateway: It is the third party that acts as a bridge between the issuer and the acquirer, and, hence the entity that co-ordinates the entire financial process flow between the customer and the merchant. The payment gateway enables the transaction to take place in real-time. It encompasses authentication,authorization and settlement. However, settlement usually happens afterwards(i.e not real-time).

III. Online Payments- An Illustrative Scenario

In order to be precise but clear, a scenario is presented here comprising various points of view from the perspectives of the two main parties involved in any e-commerce transaction i.e, merchant and customer. The author feels that such a treatment would enable anyone to easily visualize the actual transactional flow as it happens whenever an online purchase (alongwith payment) is made.

III.I Merchant point of view

A merchant selling selling any goods/services online first necessarily needs to have an online presence in the form of an e-commerce application or a website. The website forms the main (in fact the only) interface of the merchant and its customers (of course the communication channel can be e-mail or mobile phone for marketing or delivery activities). The website or a mobile application displays products/items,their description and plenty of other information. Typically, a customer visits the merchant's website/app, browses and selects products, places an order. The whole process has to culminate with the payment, the main part which of our interest here. In this context,the merchant would want the website or application to provide maximum payment options including credit cards,debit cards, internet banking, m-wallets, to name a few. For a customer of any bank using any of the aforesaid methods to be able to make the payment, the merchant must provide a ubiquitous and seamless solution that integrates with maximum banks as well as card processing organisations such as VISA. So there remain only two options for the merchant, either have private links with all banks out there, or else subscribe to a full-fledged payment gateway which would be integrated with all banks as we'l as card processors. Clearly, the first option is impractical as it entails enormous cost as well as technicality to an limitless extent. In the latter case, the exorbitant cost structure and stringent terms and conditions of payment gateway subscription makes it an option too complicated,particularly for new entrant online businesses.

III.II Customer point of view

An end customer, or simply customer, is interested in not anything more than browsing, ordering and paying with any payment method. The customer ideally wants to be care-free in the sense that he should be able to make purchase online from any merchant regardless of whether he possesses a card (credit/debit) or uses internet or mobile banking offered by any bank.This actually amounts to saying that a customer when paying on any website or application, should be able to find his/her bank in the list of banks provided by the website/application on the payments page.

IV. Essential Criteria of an Online Payment Transaction-Need for an Intermediary

In nutshell, the following three points sum up the foregoing:

- A customer of any bank should be able to purchase from any online merchant.
- An online merchant should ensure that it is able to accept payments from customers of any bank.
- The bank should be able to provide its customer the facility of paying the largest possible online merchants by being covered in payment list of leading facilitators.

Hence we need an intermediary, a seamless, integrated digital payment acceptance platform which would receive payments on behalf of merchants.

V. Working Methodology

V.I What is a Payment Facilitator?

As per *VISA/MasterCard*, a payment facilitator is a merchant entity that accepts payments on behalf of other entities known as sub-merchants and pays out to them. The latter are called sub-merchants since they are customers of the payment facilitator, which is itself a merchant in its own right. Thus a payment facilitator (called *PayFac* in the industry) offers merchant services on a sub-merchant platform. Sub-merchants then no longer have to get their own MID (Merchant ID) and can instead be boarded under the master MID of the payment facilitator. This allows merchant services to be offered in a very elegant and efficient manner.

In other words, payment facilitators are organisations that engage merchants to provide digital payment acceptance accounts-payment cards, online payments, alternative payments,etc. under a single acquirer agreement. Also called as internet payment service providers (IPSP), payment facilitators often act as intermediaries between online merchants on one side and banks on the other side. Hence a payment facilitator would ideally like to have more and more sub-merchants and at the same time more and more banks under their umbrella. This is depicted in figure 1.

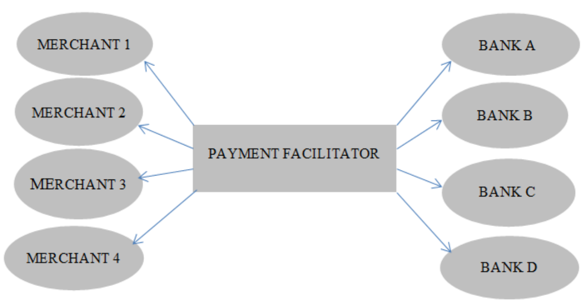

Fig. 1: Payment facilitator as an intermediary

V.II Benefits of the Payment Facilitator Model:

1. Account onboarding
   The process of offering seamless payment platform to an online merchant is technically termed as sub-merchant on-boarding, which is enabled quickly and efficiently in the payment facilitator model. Usually, a simple onboarding application form and verification is all we need to get started.
2. Underwriting
   Considerable time is also saved in underwriting as the payments facilitator can underwrite merchants with a quick evaluation tool on an ongoing basis.
3. Risk management
   The payment facilitator model also transfers the risk from individual merchants to the payment facilitator, who owns the master account (MID).
4. Sub-merchant Funding
   Payment facilitators work directly with banks to settle and disburse funds without a need for a merchant account.
5. Chargeback processing
   In case of unsuccessful transactions, refunds are processed by the payment facilitator in a hassle-free manner.
6. Reporting and billing
   Automatic report and bill generation features are present for convenience and strategic management.
7. Regulatory compliance
   The payment facilitator complies with all mandatory regulations be it with regard to data privacy or PCI-DSS and thereby absolves merchants of the burden.

V.III Transactional Process Flow

A customer making a purchase on the web application of on-boarded sub-merchant places an order and proceeds to make the payment. As already stated, the payment is handled by the intermediary,i.e, the payment facilitator. The customer, already logged in to merchant web application, is automatically redirected from the web application to the payment facilitator page,wherefrom he/she selects the payment option and proceeds. After the payment is authenticated and authorized, the customer once again is automatically redirected back to the merchant web page, where he/she receives the order conformation details. This is known as the hosted method. Although in abstract terms, the above narration explains the process flow of the payment which originates from the customer and then finally reaches the merchant. This is highlighted in figure 2.

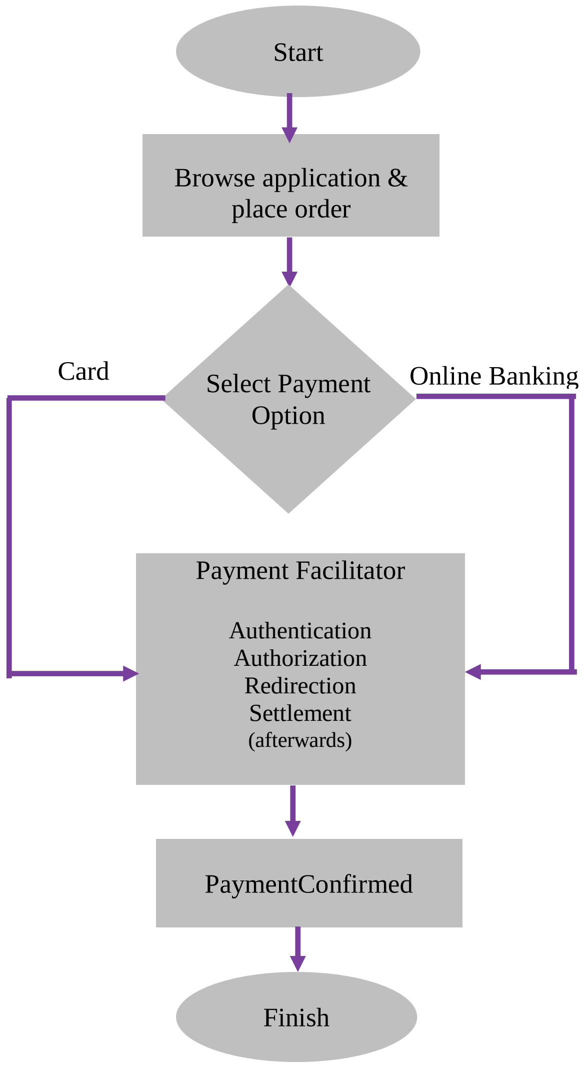

Fig. 2: Process Flow of an Online Payment Transaction

VI. Conclusion

As per a report published in The New York Times in November 2017, India scored only 22% as far as digital cashless transactions are concerned. Even the Government, through its initiatives like *Digital India*, has started offering tremendous encouragement to both organisations and customers to adopt more and more online modes of payment. Consequently, businesses are increasingly preferring and deploying facilities for online payments. However, given the rigid and unidirectional nature of legacy payment gateways, online businesses tend to invest and concentrate more on fulfilling the 'hectic' requirements of these 'traditional acquirers'[9].With payment facilitators hitting the scene, merchants have to no more worry about such requirements, and thus spend time building their business and not their payments stack. Further, given the numerous merits of the payment facilitator model, traditional software vendors like ISPs, who are already in the business of 'selling' software, are venturing into payment facilitation.

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