

## UNIT – IV

### E- Banking Delivery Channels and Facets of E-Banking

Electronic delivery channels: \*ATM card - debit card - credit card - smart cards • Tele Banking - Internet Banking - National Electronic Fund Transfer (NEFT) - Real Time Gross settlement (RTGS). Facets of E-Banking: Customer to bank - bank to bank - bank to customer - electronic central banking - intranet procurement. Payment gateway.

#### Electronic delivery channels:

##### 1.ATM card

ATM means Automatic Transfer Machine and they have been around since the late 1960's. ATMs are mostly used to withdraw cash, but a consumer can also make deposits into one's account during and outside normal business banking hours. This card can only be used at ATMs. All withdrawals using an ATM card are immediately deducted from the customer's account. ATM cards can not be used for online payments and payment at merchant sites.

##### 2.Automated Teller Machine

The Automated Teller Machine has brought innovations in the Banking sector all over the world. The advent of the ATM has made the concept of round the clock banking a reality. The ATM has been helpful to both the bankers and the customers. The long crowd of customers in the banking hall of a branch waiting for their turn to collect cash is disappearing. The branch business timings have lost significance to the customers after the introduction of ATM.

##### 3.Internet Banking

Internet Banking refers to the use of internet as a delivery channel for the banking services, including traditional services, such as opening an account or transferring funds among different accounts, as well as new banking services such as electronic bill presentation and payment which allows the customers to pay and receive the bills on a bank's website.

There are two ways to offer Internet Banking. First, an existing bank with physical offices can establish a web-site and offer internet banking in addition to its traditional delivery channel. Second, a bank may be established as a "branchless", "Internet only", or "Virtual bank". Further internet banking sites offer financial services products to customer in three basic formats

- **Information Only:** Informational only presents online information about the different banks services and products to the customers as well as general public and may include unsecured e-mail contract, with no customer identification or verification required.
- **Information Exchange:** Information Exchange Customer Information such as name, address and account information may be collected or displayed, with possible secure e-mail and/or data transfer, with verification of customer identification required. No financial transactions are to be made.
- **Transactional:** Transactional customer account information enquiry, financial transactions such as transfer of funds, payment of bill, application for loans and a variety of other financial transactions, with strong customer authentication required.

#### **4.National Electronic Fund Transfer (NEFT)**

National Electronic Funds Transfer (NEFT) is a nation-wide payment system facilitating one-to-one funds transfer. Under this Scheme any one can electronically transfer funds from any bank to any other bank in the country participating in the Scheme. However, such cash remittances will be restricted to a maximum of Rs.10,00,000/- per transaction. . Presently, NEFT operates in hourly batches - there are twelve settlements from 8 am to 6.30 pm on week days (Monday through Friday) and six settlements from 8 am to 1 pm on Saturdays.

#### **5.Real Time Gross Settlement (RTGS)**

RTGS is defined Real Time Gross settlement of funds transfers individually on an order by order basis. RTGS takes place in the books of the Reserve Bank of India, the payments are final and irrevocable. The RTGS system is primarily meant for large value transactions. The minimum amount to be remitted through RTGS is 2 lakh. There is no upper ceiling for RTGS transactions. The RTGS service for customer's transactions is available to banks from 8.00 hours to 16.30 hours on week days and from 9.00 hours to 14:00 hours on Saturdays

#### **6.Telephone Banking**

Telephone banking refers to dialing one telephone number using a telephone to access the account, transfer funds, request statements or cheque book simply by following recorded message and touching the keys on your phone. It allows the customers to check account at convenient time and get simple things done without visiting bank premises. Telephone banking aims at providing 24 hour service that is fast, convenient and secured for all customers.

#### **7.Credit Cards**

The credit card are made of plastic is widely used by the consumers all around the globe. The changes in consumer behavior and tastes led to the tremendous growth of credit cards. Credit card is a card which enables the consumers to purchase products or services without paying immediately. This credit concept is based on the principle of "Buy now pay later". Credit card is a document that can be used for purchase of goods and services all over the globe.

#### **8. Smart cards**

Smart card is a little plastic card. It is just like a credit card but it contains a micro-processor and a storage unit. This card is developed with latest technology and it is an innovation that overcomes all limitations. These cards can store at least 100 times more data than magnetic strip cards.

#### **9.Debit Card**

Debit Card is the innovative instrument in the financial services sector. It is the most convenient method of payment to the merchant establishment. It needs involvement of many banks. The card holder will present the card on completion of his purchases at the merchant establishment on production of a debit card. The card details are fed through a terminal at the merchant's establishment. The card holder is immediately debited from the card holder's account and transferred to the account of merchant establishment

## **FACETS OF E-BANKING**

E-banking means the conduct of banking electronically. It calls for eliminating of paper based transactions and radical change in the banking operations. E-Banking will operate through internet, extranet and intranet. E-Banking is therefore a banking on the information superhighways on the frontier of the internet. Parameters involved with e-banking are: customer acceptance and satisfaction, service rendered, value added for both the organization and consumer, privacy issues, profitability, operational risk, and competition from non-banking institutions. Implementation of the online strategy is a given for large banking institutions, but still being considered by smaller community banks. E-Banking must have at least the following dimensions:-

- 1) Customer to Bank E-Banking.
- 2) Bank to Bank E-Banking
- 3) Electronic Central Banking
- 4) Intranet Procurement.

**(1) CUSTOMER TO E-BANKING.** E-banking is basically Internet based. Banking products and services such as deposits, remittances, credit cards etc. as well as all important banking information can be made available with easy access to customers on Internet. Customers can make use of these services with no restricted office hours, no queues, no tellers and waiting. Several network innovations of E-banking can be visualized such as smart cards, Electronic data Interchange etc. of course, the banking operations have to be guarded against unauthorized access by intruders.

**(2) BANK TO BANK E-BANKING.** This form of electronic banking is for transacting inter-bank transactions such as money at call etc. This type of E-Banking is driving extranets, which is restricted to banks only. Hence it is well secured and unauthorized access is less.

**(3) ELECTRONIC CENTRAL BANKING.** Under this E-central banking all the banks within the purview of a central bank are interconnected on extranet to facilities clearing of cheques, management of cash reserves, open market operations, discounting of bill etc. in fact, the central bank has to be connected with the government treasury on extranet to carry out its function as an agent of the government. Again, the central bank of all countries can be inter-linked with the I.M.F World Bank and other international financial institutions through extranets.

**(4) INTERNET PROCUREMENT.** For the transactions that are internal to a bank, between the bank and its branches and subsidiaries, Intranet procurements of banking are required. On the other hand, Extranet permits a bank to have full control over the users of intranet and information to be transmitted. The Extranet-Intranet-Internet relationship that exists in the process of E-Banking. Extensive work is required to integrate internal and external communications of banking related information through banking internet and intranet for the development of the financial sector.

### **Payment Gateway**

A payment gateway is the service that authorizes credit card payments for online and offline businesses. It is the equivalent of a physical point of sale terminal in a shop or restaurant. It lets your customer submit their credit card details and then securely passes this sensitive financial information from the customer to the merchant and then between the merchant and the bank. The payment gateway then tells you whether the charge has been approved by the cardholder's bank and submits your charges for settlement. Settlement is

where the payment amount is deducted from your customer's credit card account and deposited into your merchant account.

## **Working Of Payment Gateway**

There are four simple steps in the payment gateway process:

### **1. Collection**

Your customer chooses the product or service they want to purchase and then enters their credit card details onto your payment page. This information is then directed to your payment gateway.

### **2. Authentication**

Your payment gateway then takes this information, and sending it via a shielded link to your bank account.

### **3. Authorisation**

At this point you will know that the sale has been approved and you can deliver the ordered products or services.

### **4. Settlement**

At last, the transaction data is verified by your bank and the money from the sale is deposited into your account. When the actual payment will arrive in your account will depend on your payment gateway – it can be as little as real-time or as long as 21 working days.

## **List of Payment Gateways in India**

### **1 InstaMojo Payment Gateway:**

Instamojo Payment Gateway allows merchants to Collect online payments with ease with or without a website. Charges of InstaMojo are quite reasonable.

- InstaMojo Payment Gateway service charges are:
  - o Annual maintenance Charge: ZERO. yes ZERO
  - o Transaction Fee per Transaction: Flat fee @ 2% + Rs 3 per transaction

### **2 CCAvenue Payment Gateway:**

CCAvenue is one of the largest payment gateway in India, offering wide range of payment options. It offers 200+ payment options inclusive of 6 credit cards such as Amex, JCB, Diners Club, Mastercard, Visa and eZeClick. It also supports 27 major currency, thus enabling you to serve customers in some major global markets out of India. CCAvenue also allows Multilingual payment page in 18 major Indian and international languages.

### **3 EBS Payment Gateway:**

EBS or E-Billing Solutions is the first Indian merchant account provider to achieve the PCI DSS 3.0 standards of compliance. It is also certified by security and process adherence followed and audited by ISO 27001- 2013 standard. Therefore it is one of the most secured online service provider in the world.

- EBS payment gateway service charges are:
  - o Initial Setup fees: Zero as a special promotion instead of Rs 9599
  - o Annual maintenance Charge: Rs 2400 flat applicable every year. Apart from that you also have to pay one time setup fee, which are variable, depending on the package you select.
    - o Transaction Fee per Transaction: Variable charges apply depending on the package you select.

#### **4 PayPal Payment Gateway Service:**

PayPal is a Global payment platform available in 200+ countries across the world. PayPal claims to have processed 4 billion payments (including 1 billion mobile) in 2014. Over 173 million customer use Paypal on a regular basis. That is the reason if you are expecting orders from international consumers, you have to have PayPal integrated on your eCommerce Store. PayPal supports more than 100 currencies with fund withdrawal facility in your bank accounts in 57 currencies and hold balances in their PayPal accounts in 26 currencies. In India merchants primarily use PayPal to receive funds from foreign customers only as due to banking regulations an Indian company cannot accept Indian credit cards via Paypal.

#### **5 fonePaisha Payment gateway**

fonePaisha is an interoperable Payment solutions that brings the worlds of mobile and payments together. fonePaisha serves B2B, B2C use cases and also builds customized large payment solutions.

#### **6 Atom Paynetz Payment Gateway service:**

Atom is promoted by FT Group and it is an innovative Payment Service Provider with over 100 payment options, 15 million + transactions, 4500+ strong merchants across the country.

#### **7 PayTM payment Gateway**

Paytm has emerged as a leading payment due to its online consumer base with 'Paytm Cash' wallet. Therefore paying with Paytm could be beneficial for a small eCommerce merchant.

#### **8 DirecPay Payment Gateway Service:**

DirecPay is one of the largest payment gateway solutions service provider in India. Their charge are:

- Annual maintenance Charge: Zero.
- Transaction Fee per Transaction: variable transaction fee apply
- Domestic Credit and Debit cards on Visa, Mastercard, Maestro, RuPay: Flat fee @ 2%
- Wallets: Flat fee @ 2%
- NEFT, IMPS, Cash cards & UPI: Flat fee @ 2%
- Amex, ezeClick, JCB and Diners: Flat fee @ 3%
- Taxes extra as applicable from time to time

#### **9 PayUbiz Payment Gateway Service:**

PayUbiz is part of Naspers, a US\$25 Billion media and internet company listed in Johannesburg and London stock exchange. It is a payment gateway solution provider used by more than 70 of the top 100 ecommerce companies. PayUbiz is used by large enterprises such as Snapdeal, Jabong, Bookmyshow, Ola, Cleartrip, Redbus, GoIbibo, Zomato etc.

#### **10 Mobikwik Payment Gateway:**

Mobikwik (formerly known as Zaakpay) Payment Gateway is a popular service for online credit, debit card & internet banking processing transactions. They claims to setup an account in two days time.

#### **11 Emvantage Payment gateway Service:**

Emvantage is a leading Payment PCI-DSS V3.1 certified payment platform in India.

#### **12 Razorpay Payment Gateway**

Razorpay is the only payments solution in India which allows businesses to accept, process and disburse payments with its product suite. It gives you access to all payment modes including credit card, debit card, netbanking, UPI and popular wallets including JioMoney, Mobikwik, PayUmoney, Airtel Money, FreeCharge, Ola Money and PayZapp.