OPERATIONAL SYSTEMS AN ENABLER FOR DIGITAL PAYMENTS

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ABSTRACT

The contemporary world is transacting business worth millions of dollars today. The essential feature of any payment system is its settlement procedure and finality of payment. The fund transfer systems have evolved globally making it faster, secured, agile and seamless to transact through any banking system anywhere in the world. The global system for funds transfer is through SWIFT which has become the predominant payment system worldwide, due to its inherent advantages like organizational competence, relevance, cost effectiveness, scalability and various services rendered to leverage its position globally. In India we have the RBINET, a national system of fund transfer which works closely with the global system of funds transfer. This system authenticates and transfers payments to the mandated entities through its national networks.

Keywords: *Funds, Payment, Digital etc.*

INTRODUCTION

The use of updated technology has replaced the slower legacy systems of conducting business transactions with a faster and secured payments system. With the advent of globalization the method of affecting payments for trade and commerce done throughout the world has undergone a sea change. The payment system is generally a collection of instruments (like cheques, drafts etc.) regulations and procedures by which people meet their payment obligations and financial institutions exchange funds on their own behalf or for their clients. Electronic fund transfer implies speedy, transfer of funds through electronic media. It is one of the most pertinent aspects of modern businesses, as billions of dollars are exchanged daily among the banks, through the use of computerised communication networks, which combine the benefits of speed, accuracy, economy in operation cost and secured payment gateways.

SWIFT - GLOBAL SYSTEM FOR FUNDS TRANSFER

The Society for World-wide Inter Bank Financial Telecommunication (SWIFT) was launched in December 1991. In India, the Reserve Bank and its constituent commercial banks have become the member banks of the SWIFT, and started using its facilities with effect from 2nd December 1991.There has been a large scale increase in the membership of users of SWIFT as it has brought about a turnaround in ease of doing business through banks globally. At the outset there were only 239 member banks from 15 countries in 1973, but after that, the number of banks who have become members has increased to more than 11,000 banks in around 200 countries.

This system handles more than 42 million messages per day through its messaging network.

ORGANISATIONAL COMPETENCE

SWIFT is an organization with a vast messaging cooperative network system of the banks worldwide. It's headquarters are in Brussels, Belgium and the number of member banks/shareholders are around 11,000 members. SWIFT facilitates transmission of information and instructions through an established system of codes. The ownership of shares is allocated in proportion to traffic volume sent on the system and is reviewed periodically to reflect actual system usage. The communication between member institutions is smooth and secure due to SWIFT, this depicts a very close and dynamic link between members. This system of funds transfer instantaneously helps in facilitating improved banking and financial services. Each country under the SWIFT system is assigned an eleven character code called Bank Identifier Code (BIC) which is unique and used for country identification.

RELEVANCE

The international financial services industry is witnessing increasing competition, growing volumes and challenging customer demands for faster and more economic services. Technological developments in computers and communications now make it possible, to handle financial data at an extremely low cost, regardless of distance. Development costs and lead times required for modern data systems are also rising and require highly skilled staff. SWIFT has proven over the years that in building a common service designed for and with its member banks, the cost for them can be brought down to extremely low levels while maintaining highest degree of security and reliability. SWIFT is continuously striving to grow in line with development of international banking. In selecting new services and products, SWIFT's objective is to provide users with opportunities to reduce risks and costs through standardisation of methods procedures. It also facilitates sharing of the use of existing facilities and development of new services.

SERVICES RENDERED

For facilitating efficient and essential transactions for international banking operations SWIFT offers various services like:

I. security transactions
II. treasury transactions
III. trade transactions
IV. account summary statements
V. forex and treasury transactions
VI. system transactions
VII. clearing and settlement instructions for securities
VIII. reporting of balances
IX. payment gateways.

SWIFT provides services and more importantly, recently has introduced dashboards and utility reporting which enhances the user interface through a dynamic and real time view of monitoring the messages. The main prerogative of SWIFT is to provide a secure, reliable and scalable network. This system is regularly updating its messaging, connectivity and software solutions procedures that are comprehensible to the banking staff throughout the world by the use of standard message formats that communicate information in a manner which is universally recognised and accepted. The clients of SWIFT have access to multiple products and services that enable them to send and receive transactional messages. These message formats are developed to conduct fast, seamless, secure communication to be sent to the countries around the world. SWIFT has robustness in the message format design which facilitates huge scalability through which it can expand its services exponentially. Today, it is the largest and most streamlined method for international payments and settlements. Banks can offer better and timely services to their clients as the

transactions done through SWIFT provide real-time instructions which match the treasury and forex transactions. Banks can better match their services to the needs of their customers, achieving client satisfaction through:

- Seamless and accurate transactions;
- Reduced payment errors;
- Updated banking market infrastructure for processing payments
- Clearing and settlement instructions for payments, securities,
- A robust and secure payment architecture.

BENEFITS

Before SWIFT services were available to all its member banks there were telex services only for transfer of international funds. The main issues with it were low speed, security concerns and a free message format. The telex senders had to send vivid descriptions of every transaction in sentences that had to be interpreted and executed by the receiver. Moreover, the SWIFT system charges are only a fraction of the cost of a similar telex or cable transmission. It now sends messages for a variety of actions like security transactions, trade transactions, treasury transactions and system transactions. The inter-bank transaction instructions are transmitted from bank to bank immediately. Due to the inherent scalability of SWIFT it is providing its services to banks, brokerage institutes, trading houses, asset management companies, clearing houses, depositories, corporate business houses and exchanges.

REDUCTION IN COST

Through its various messaging hubs, software and network connections SWIFT offers multiple products and services that facilitate sending and receiving messages for its clients. All the members of SWIFT pay a one-time joining fee plus annual support charges. It also charges users for each message based on message type and length. The banks are using automation to conduct transfers through SWIFT and for installing the requisite hardware and software which is SWIFT compliant the banks have incurred a considerable cost. However, banks could recover the cost soon because of the cost reduction in sending the messages. The cost incurred to send a message through telex was Rs 70 but it costs only Rs 16 to send a message through SWIFT which is quite cost effective and has thereby reduced cost considerably.

RBINET - NATIONAL SYSTEM FOR FUNDS TRANSFER

The previous legacy system used in the traditional brick and mortar system was very tedious and slow, therefore, a new system called "The Interbank Electronic Funds Transfer System" or EFT was introduced, using RBINET software (developed by RBI) over the architecture of BANKNET set up by RBI. BANKNET is a global payments network that authorizes and facilitates transactions from anywhere in the world. This system has a robust and secure software architecture which is capable of handling millions of transactions each hour with a latency of as low as around 200 milliseconds. The whole system is regularly updated and practically tested before it is implemented, it is a Virtual Private Network (VPN) wherein all the interlinking nodes are linked together. Under the scheme, remittance can be easily made from any of the branches of participating bank at designated centre to any other branch of the same or any other participating bank. The EFT mechanism is primarily done to facilitate electronic transfer of money from one bank account to another for completing one or multiple institutions via electronic means without the intervention of bank staff.

ELECTRONIC CLEARING SERVICES (ECS)

1. Credit Clearing

The main objective of the scheme, introduced by the Reserve Bank of India, is to provide an electronic

mode of payment/receipt for repetitive and periodic transactions. Essentially, ECS facilitates bulk transfer of money from one bank account to many bank accounts or vice versa. Transactions are processed under National Automated Clearing House (NACH) operated by National Payments Corporation of India (NPCI). The system benefits the corporate customers of banks for effective bulk and repetitive payments like salary, pension, dividend, interest refund and commission and obviates the need for any handling of paper. ECS has the leverage of going paperless, thereby promoting sustainable practices. It is being utilised by companies, institutions, corporations with a large number of beneficiaries opting for ECS payments.

This scheme takes the advantage of the core banking enabled branches in banks. Under the scheme, corporate customers provide the payment details in a prescribed format which includes the details of the beneficiaries, date on which the amount is to be credited in the beneficiary accounts through the sponsor bank to the ECS centre. The ECS centre debits the amount of the sponsor bank on the date scheduled for payment and credits the destination banks, for onward credit of the accounts. on a credit advice generated bank-wise/branch-wise/account type-wise. Thus, both the corporate customers and the beneficiaries can save on time, energy and money. The beneficiary gets the credit without going through the hassles of depositing the instruments in the branch and waiting for its clearance.

As per the procedural Guidelines for ECS (Credit Clearing), the User company/Government has to approach its bank with a request to act as its agent (i.e. Sponsor Bank) under the scheme. The Bank will then forward the Users application to the National Clearing Cell (NCC) of RBI confirming its willingness to take up the responsibility. Once the arrangement has been approved by the NCC, the User will obtain full particulars of the bank accounts of the beneficiaries from them by way of a mandate form.

When the dividend, interest, pension and salaries etc., become payable, the user will apply to the Sponsor Bank in a standardised format, encrypted information about the Destination Account Holders who have opted for receiving payments of dividends, interest, etc. get the amount directly credited to their bank accounts. Simultaneously, the user will send credit advices to all the beneficiaries.

The Sponsor Bank will pass on this payment mandate to the NCC who will generate a validation report. The Sponsor Bank will arrange to get the validation report verified by the User. On confirmation of the validation report, NCC will process the information destination bank wise and send it to the service branches of the Destination Banks.

The service branches will send the Clearing Reports to their concerned branches so that the individual accounts of the Destination Account Holders can be credited. On the settlement date, RBI will debit the account from the Sponsor Bank and credit the accounts of the various destination banks. The Sponsor Bank in turn will recover the amount from the User and the Destination Bank's branches will credit the accounts of the beneficiaries.

The scheme provides for reversal of entries in case of items not credited by the bank (where money available has not been recognized by the bank) . The advantages of the scheme are as follows:

(a) There is no need to print and issue paper instruments for extending credit to large number of beneficiaries, thus avoiding cost of printing, despatch, etc., and problems due to misplacing/tampering of the instruments in transit.

(b) The workload of destination bank branches is reduced as there is no need to send the instruments for outward clearing.

(c) The beneficiaries get prompt credit to their account on due dates.

(d) The NCC will get lesser instruments for clearing.

2. Debit Clearing

This is just the reverse of credit clearing. Under the scheme, there are many debits to various banks/branches/customers' accounts against single credit to one bank/branch of the corporate customer. The procedures are the same as credit clearing, but instead of crediting the customers' accounts, the branches will be debiting the customers' accounts.

The RBI has introduced the ECS (Debit Clearing) scheme for the use of utility companies like Telephone and Electric companies etc. The ECS (Debit Clearing) provides to subscribers/consumers an option of payment of their utility bills through their bank accounts. Under the scheme, accounts of large number of consumers/subscribers are debited and the account of the utility company is credited.

Under the scheme, the User Utility Company which avails of the ECS (Debit Clearing) facility will have to get registered with its bank, that has to agree to act as its agent, i.e. Sponsor Bank. This bank will forward the application form of the User to the National Clearing Cell (NCC) of the RBI confirming its willingness to take up the responsibility. On approval by the NCC, the User will approach its subscribers/consumers and request them to furnish them with the authority to debit their accounts periodically with the amounts of their bills. A copy each of the mandate forms received from the subscribers/consumers will be sent by the User Utility Company to the destination to bank branches where the accounts of the respective subscribers/ consumers are maintained. The destination bank branches will verify the signatures of the subscribers/consumers on the mandate forms with those recorded with them and keep the mandate forms on their record. The User Utility Company will continue to send the bills periodically on the bills date to the consumers/subscribers for their information. The bill will be debited to the bank account of the subscriber/consumer on the scheduled date after the date of the bill. In case the subscriber/consumer has any complaint about the correctness of the bill, he should contact the designated official of the User within 10 days from the date of the bill so that remedial steps may be taken, if necessary.

Simultaneously, the User Utility Company will give the requisite mandate to the Sponsor Bank in a standardised format of encrypted information about the subscribers/consumers who have opted for payment of their utility bills to the User Utility Company by direct debit from their bank accounts.The Sponsor Bank will pass on this information to the NCC who will generate a validation report The Sponsor Bank will arrange to get the validation report checked by the User and on confirmation of the validation report, NCC will process the information destination bank-wise and send it to the branches of the destination banks.

Thereafter, the clearing reports are sent to their concerned branches so that the individual accounts of the Destination Account Holders (i.e. Subscribers) can be debited. On the settlement date, RBI will debit the accounts of various destination banks and credit the Sponsor Bank. The Sponsor Bank in turn will credit the User Utility Company's account with them and the Destination Banks' branches will debit the accounts of the subscribers/ consumers.

The scheme provides for reversal of entries in case of rejected debit items. The advantages of the scheme are as follows:

(a) A subscriber/consumer need not go to the designated collection centres/banks for making payment of his bill.

(b) The utility company need not make elaborate arrangements for collection of its bills. It gets its bills collected promptly and without much botheration.

(c) The number of cheques presented to the National Clearing Cell (NCC) for clearing will get reduced.

3. RAPID (Receipt and Payment Instrument Documents)

This system facilitates the transfer of funds between banks through centralised exchange of information containing debit to various banks and credit to

sponsor banks as designated by the companies/utility service bodies. Under the scheme, the bank/branch will read and record the MICR information encoded on the instruments and transmit the information to NCC for processing and settlement. The utility companies would prepare their bills containing MICR band. These will be processed by the bank/branches and sent to NCC, where settlement will be done to debit the banks and credit the sponsoring bank of the organisation. The customers can either pay cash or authorise the banks to debit their accounts maintained with the branches. This is a very useful system for making or receiving payments of regular and recurring nature like electricity telephone bills, insurance premiums, etc.

This scheme envisages a convenient and quick method of disbursal of funds to the utility companies. The subscriber/consumers of the utility services need not give mandates to the Utility Company to debit the amounts, of their bills to their accounts directly. Instead, they can make payment of their utility bills by approaching their own banks instead of the designated collection centres/banks of the Utility Companies as at present. For this purpose, the Utility Company desiring to introduce the scheme will have to approach its bank and request it to act as its Sponsor Bank. The Sponsor Bank will forward the application form of the Utility Company for registration to the National Clearing Centre confirming its willingness to take up the responsibility.

Under the scheme, the subscriber/consumer can go to his own bank and make payment of the bill either in cash or by debit to his account. The main bill will be given to the subscriber/consumer as receipt as stated above. The counterfoil will remain with the collecting branch as its voucher. The third counterfoil will be sent by the bank branch to its Service Branch.

The Service Branch will prepare the data giving particulars of all the bill payments collected by its branches and send it to the NCC. The NCC will process the data received from all the banks and on settlement dates, RBI will debit the accounts of various collecting banks and credit the Sponsor Bank as per the reports prepared by the NCC. The NCC will pass on the information to the Sponsor Bank giving particulars of all the bill payments received by various bank branches during a given period. The Sponsor bank will extend credit to the account of the Utility Company to enable it to update the payments made by various subscribers/ consumers.

The scheme is very convenient for subscribers/consumers and is also advantageous to the Utility Company as its bill payments collection work is transferred to the bank branches. The bulk of the payments to these companies is made by the above method.

REFERENCES

- SWIFT. “Swift History” https://www.swift.com/about_us/history.”
- SWIFT. “About SWIFT” https://swiftinstitute.org/about_us/.”
- SWIFT,“FinancialMarketInfrastructures,https://www.swift.com/our_solutions/market_infrastructures
- SWIFT.“DoingMoreForCapitalMarkets,https://www.swift.com/your_needs/banking.”
- Singh, Dr. Vir -.J Shankar, "Development Banking in India", Deep and Deep Publications, 1985.
- Bhasin T.M. "E-Commerce in Indian Banking", Authors Press, 2003.
- Wendy G. Lehnert, "Internet - A Beginners Guide to the Internet and the World Wide Web”, University of Massachusetts, Arnherst, 1999.
- Bavveja Arun, "Information Technology and Development", Kalpaz Publication, 2006.
- Bavveja Arun, "Introduction to Information Technology", Kalpaz Publication, 2006
- Naravan Ajit & L.K. Thakur, "Internet Marketing E-Commerce and Cyber Law", Printed in India at Tarsun Offset, Delhi.