

Trends Of Payment And Settlement System Through E-Banking

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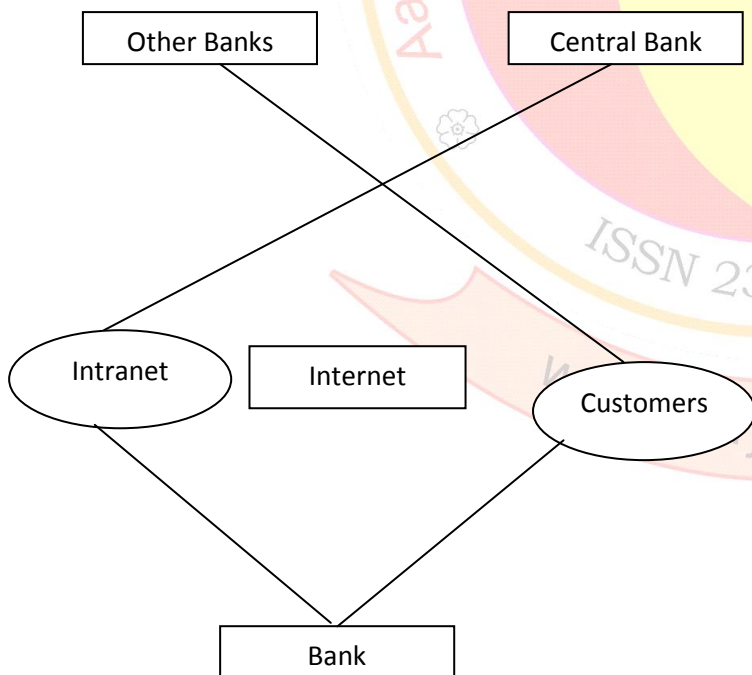
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Introduction-

E- Banking more popular today as it is banking Via digital television. Use of internet Technology has become a very powerful force changing the very core of traditional banking .The opportunities for banks in the internet arena are varied as they become technology providers by spinning off technology resources to start up new business stream become content providers for information regarding products, indices etc. enables by providing backbone system to support multiple payment system alternative. The delivery of banking products /services by electronic channel may be defined as electronic banking.

In India, the ICICI bank first offered internet banking services from 1997.

Micro Model of E-Banking –



Above model indicates the internet- intranet –extranet relationship involved in the process of electronically conducted banking business in India. The payment and settlement are regulated by the payment and settlement regulations, 2007. In the era of rising means of electronic payment systems, the bank focused its efforts on safety and security of

digital transactions. RBI has been doing a commendable job in the effective operation of the payment and settlement system. The payment and settlement system consists of various forms such as paper clearing involving cheques, electronic payment like Real Time Gross Settlement (RTGS), National Electronic Fund Transfer (NEFT), Card transaction through Automated Teller Machine (ATM) and Point of Sale (POS), mobile payment and prepaid instruments and other miscellaneous instruments. Effective payment and settlement system mechanism is an essential component of the monetary system .The growth of the payment and settlement system would act as catalyst for economic growth. The present study is in this direction to understand the trends and pattern of the payment and settlement system in India.

Methodology -

The Study uses mainly secondary data. Secondary data is collected from RBI Publications and various Books. The data used for the study is from the period of 2012-13 to 2017-18. Simlpe statistical tools such as percentage, average, graphs are used to analysis and interpret the data.

Payment Systems –

Use of paper based instruments (like cheques, drafts and the like) decreasing over a period of time popularize the electronic payment products in preference to cash and cheques.

Electronic payments –

The initiatives taken by RBI in the mid-eighties and earl –nineties with the introduction of new payment products has cost –effective alternative system.

Electronic Clearing Services (ECS) Credit –

The bank introduced the ECS scheme during the 1990s. India has multiple payment and settlement systems. The Indian banking sector has been growing successful, innovating and implement electronic payment to enhance the banking system. India is clearly one of the fastest growing countries for payment cards in the Asia-Pacific region . In reality customers still prefer to pay “in line” rather than online, now over 75% of all transaction volume are in the electronic mode. This facility used for large value or bulk payments where the receiver’s account is credited with the payment from the institution

making the payments .Timely basis payment like salaries , dividend and commission have made.

Electronic Clearing Services (ECS) Debit-

This method is used mainly for small value payments from customers or individuals to big organizations or companies.

Credit Cards and Debit Cards –

Card payments form an integral part of E-Payment in India because customers make payments on their card –paying their bills, transferring funds and shopping. Debit card entered Indian Banking industry in 1998 and today nearly ¾ th of the total number of cards in circulation. Another recent innovation in the field of plastic money is co-branded credit cards which combine many services into one card where Banks, airlines, telecom companies enter into business. They used in ATM’s and also at point of sale (POS) terminals and while making payments on the net.

Point of sale systems –

Customers may use a plastic card for retail purchases and immediate transfer of funds to retailer’s account .

Real Time Gross Settlement (RTGS)-

RTGS is a funds transfer mechanism where transfer of money takes place from one bank to another on a ‘Real Time’ and on ‘gross ‘ basis. The transactions are settled as soon as they are processed. This was introduced in 2004. RTGS processed for amount exceeding Rupees two lakhs. RTGS systems are usually operated by a country ‘s Central Bank .Efficient national payment system reduces the cost of exchanging goods and services and is indispensable to the functioning of the interbank, money,Capital markets . The RTGS system suited to low volume high value transactions.

National Electronic Funds Transfer (NEFT)-

Stared from Nov.2005. This system is a nationwide facilities individuals, firms and corporate to electronically transfer funds. This system hourly batches are run in order to speed up the transactions. NEFT is for transactions with amount of less than Rupees two lakhs. NEFT to facilitate an efficient , secure, economical , reliable , expeditious system of fund transfer and clearing in the banking sector throughout India . Popularity due to its saving on time and the ease with which the transactions can be concluded . NEFT high degree of security and operational reliability

National Automated Clearing House (NACH) -

NACH for Bank , Financial Institution , Corporates and Government is a web based solution to facilitate interbank , high volume , electronic transaction which are repetitive and periodic in nature .NACH system used for making bulk transactions towards collection of payment relating

to telephone , electricity, water, loans, investments in mutual funds, insurance premium etc. The NACH payment provides a robust secure and scalable platform to the participants with both transaction and file based transaction processing capabilities. It has best in security , cost efficiency , payment performance , multi level data validation facility accessible to all participants across the country .

Cheque Truncation System (CTS) –

An Electronic image of the cheque is transmitted to the drawee branch for payment through the clearing House saving time and costs involved in traditional clearing system . Physical movement of cheque stopped. Quicker clearance and speedier credit of the amount to your Account .Loss of cheque in transit , mishandling avoided resulting in better customer service .

Table 1: – Shows Volume (million) of National Automated Clearing House, Credit Card, Debit Card, RTGS, Government Securities Clearing

Sr No	Payment System	Volume (million)					
		2012-13	2013-14	2014-15	2015-16	2016-17	2017-18
1	National Automated Clearing House	–	–	86.5	140.4	205.7	250.3
2	Credit Card	320.6	390.1	509.1	785.7	1087.1	1405.2
3	Debit Card	327.5	409.1	619.1	1173	2399.3	3343.4
4	Government Securities Clearing	0.4	0.7	0.9	1	1.5	1.1
5	RTGS	55	68.5	81.1	98.3	107.8	124.4

Chart 1- Volume (million) of National Automated Clearing House, Credit Card, Debit Card, RTGS, Government Securities Clearing

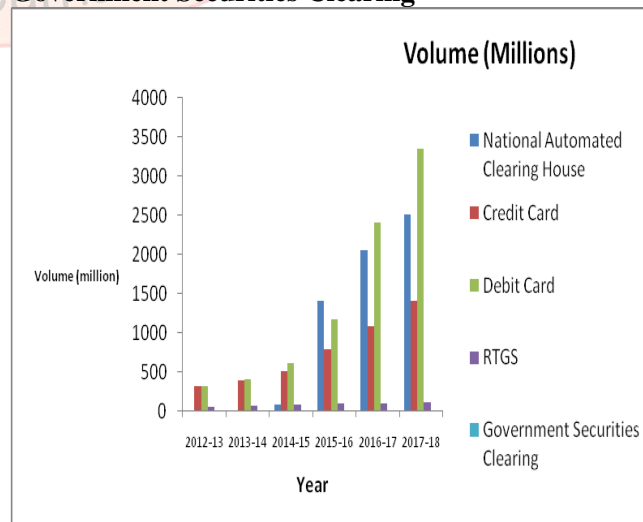


Table 2: – Shows Value (billion) of RTGS, Government Securities Clearing, Forex Clearing

Sr No	Payment System	2012-13	2013-14	2014-15	2015-16	2016-17	2017-18
1	RTGS	539307.5	670841	734252.4	924578	987904	1107125
2	Govt Securities Clearing	72520.8	119948	101848.2	209778	404389	370364
3	Forex Clearing	221990	20117	284459.5	359257	422255	421131

Chart 3- Shows Value (billion) ECS DR , CTS, Non MICR Clearing

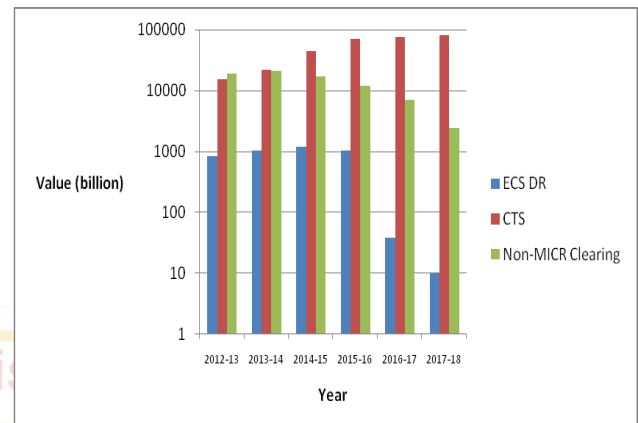


Chart -2 Shows Value (billion) of RTGS, Government Securities Clearing, Forex Clearing

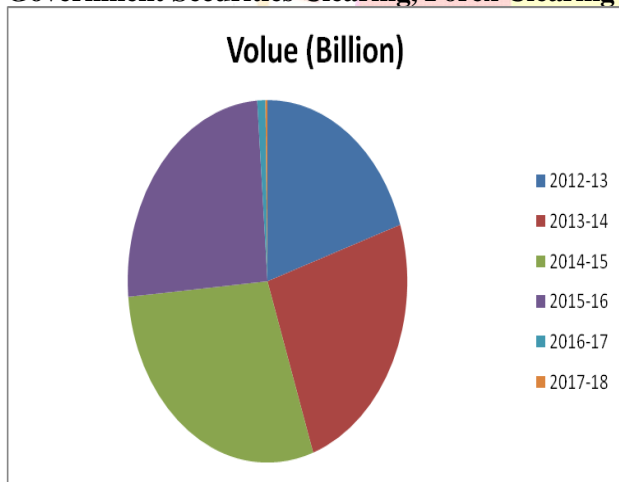


Table 4- Shows Volume (million) Forex Clearing, CTS, Non-MICR Clearing , ECS Dr, ECS CR, NEFT

Sr No	Payment System	2012-13	2013-14	2014-15	2015-16	2016-17	2017-18
1	Forex Clearing	1.3	1.4	1.5	1.9	1.9	2.2
2	CTS	180	275	589.3	958.4	1111.9	1138.4
3	Non-MICR Clearing	227	215.3	225.7	138.4	94.8	32.6
4	ECS DR	104.7	170.5	192.9	224.8	8.8	1.5
5	ECS CR	121.5	122.2	152.5	39	10.1	8.1
6	NEFT	220.1	394.1	661	1252.9	1622.1	1940.4

Table 3 – Shows Value (billion) ECS DR , CTS, Non MICR Clearing

Sr No	Payment System	2012-13	2013-14	2014-15	2015-16	2016-17	2017-18
1	ECS DR	833	1033.3	1208	1052	39	10
2	CTS	15103.7	21779.5	44203.1	69889	74035	79451
3	Non-MICR Clearing	18875.1	20893.3	17081.3	11972	6923	2442

Chart 4 -Volume (million) Forex Clearing, CTS, Non –MICR Clearing, ECS DR, ECS CR, NEFT

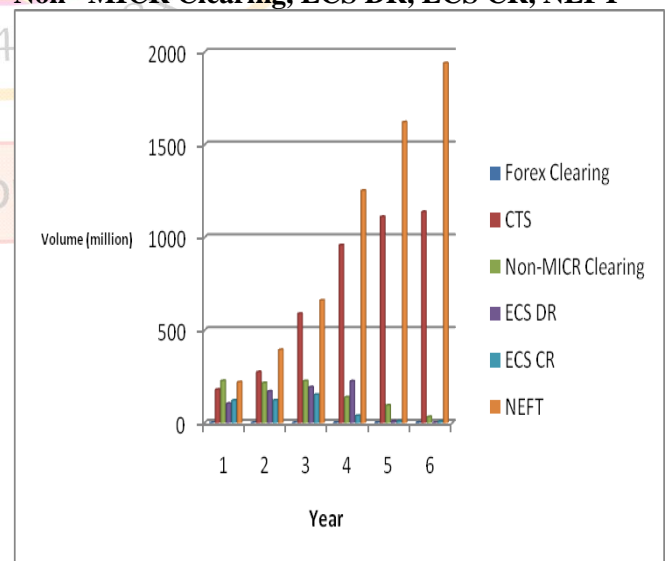


Table 5- Shows Value (billion) National Automated Clearing House, Credit Card, Debit Card, ECS CR, NEFT

S r N o	Payment System	2012-13	2013-14	2014-15	2015-16	2016-17	2017-18
1	National Automated Clearing House	–	–	214.3	3802	7910	10738
2	Credit Card	906.1	1229.5	1539.9	2407	3284	4590
3	Debit Card	534.3	743.4	954.3	1589	3299	4601
4	ECS CR	1837.5	1771.3	2492.2	1059	144	113
5	NEFT	17903.5	29022.4	43785.5	83273	120040	172229

Chart. 5 -Value (billion) National Automated Clearing House, Credit Card, Debit Card, ECS CR, NEFT

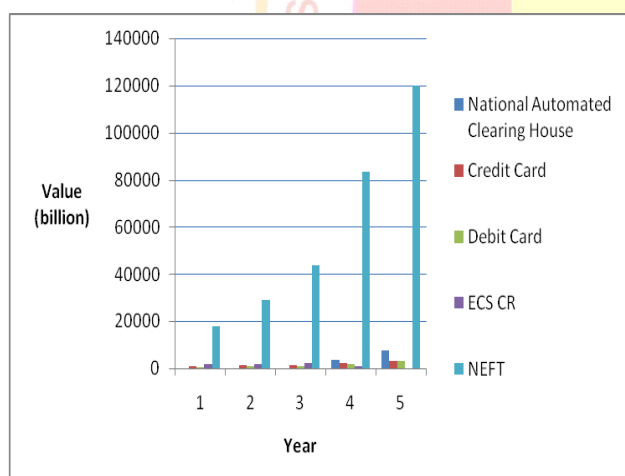


Table 1 and 2 indicates the trends in the movement of electronic payments. It can be seen that the volume of electronic payment have grown over the years. The demonetisation (Dec.2016) .The payment and settlement system recorded growth in 2017-18 , with volume and value growing at 44.6% and 11.9% respectively. An increase of 56.0% and 24.8% respectively in 2016-17.Reduction in the share of paper based Clearing instrument from 11.1% in 2016-17 to 7.4% in 2017-18.

From the above table RTGS shows increment over the year. As RTGS only way to get same day cleared funds and so may be used when payment needs to be settled urgently.

Amongst the electronic modes of payments the RTGS handled 124 million transactions value at

Rs. 1167 billion in 2017-18 up from 108 million transactions valued at Rs. 982 billion in the 2016-17 . Increase at a very pace due to rampant consumerism The NEFT system handled 1.9 billion transactions valued at Rs. 172 trillion in 2017-18 up from 1.6 billion transactions valued at Rs.120 trillion in the 2016-17 Shows growth 20% in volume and 43.5% in terms of value . At the end of March 2018, NEFT facility was available through 140339 branches of 192 Banks.

During 2017-18 number of transactions carried out through Credit Cards and Debit Cards was 1.4 billion and 3.3 billion respectively. Credit card and Debit Card transactions shows increased trend over study period because of modi’s Digital India age. Most of customers preference online transaction rather than manual because it saves time and energy . In online transactions security is the most important factor from the point view of customers.Mobile banking services witnessed a growth of 92% and 13% in volume and value respectively, while the number of registered customers rose by 54 % to 251 million at March 2018 from 163 million at March 2017.

Substantial growth with the number of point of sale (POS) terminals increased by 24% from 2.53 million in 2016-17 to 3.14 million in 2017-18. ATM’s witnessed a marginal decline from 2,22,475 to 2,22,247.

Overall the payment and settlement system registered a healthy growth in volumes at 23.2% and value at 14.2% during 2013-14. Paper to electronic payments had a positive impact leading to a reduction in paperbased transactions in volume as well as in value terms. During 2013-14 in volume paperbased transactions accounted for 34.6% (43.4% during 2012-13) of total non-cash transactions .Share of paper based transactions reduced to 6.3%(7.6% during 2012-13). During 2013-14 RTGS processed 81 million transactions valued at 734 trillion . On April 2014 number of RTGS at 109506. As on April 2014 NEFT available at 111619 branches of 158 banks. During 2013-14 NEFT handled 661 million transactions valued at 44 trillion . March 2014 NEFT proceed record volume 82.8 million transactions . Which have good and better track record also customer service quality.

During 2014-15 Electronic Clearing Service (ECS) debit handled 193 million transactions valued 1268 billion and ECS credit processed 152 million transactions valued at 2493 billion . ECS (Credit) over a time it has become one of the most convenient method of making large payments.

During 2014-15 , 509 million transactions valued at 1539 billion transacted through Credit Cards while 619 million transactions valued at 954

billion were through debit cards .During the year 2013-14 mobile banking services handled 95 million transactions valued 60 billion.\

Conclusion –

With online presence, bank can rebuild their brand in terms of service World Wide at low Costs. E- banking has become a necessary survival weapon and is fundamentally changing the banking industry worldwide .Today ,the click of the mouse offers customers banking services at a much lower cost and empowers them with unprecedented freedom in choosing vendors for their financial service needs. Banks have to upgrade and constantly think of new innovative customizes packages and services to remain competitive. The Indian experience of E-Banking is gradually merging with its international counterparts.While the Private Sector and foreign banks have been fast in adopting internet technology in client servicing .

References-

1. Managing Indian Banks (The Challenges Ahead) ,Vasant Joshi & Vinay Joshi , Sage Publications, New Delhi -110044.
2. Banking and Finance, B.S.Sreekantaradhya,Deep & Deep Publications Pvt.Ltd.,New Delhi-110027.
3. Indian Banking (Moving Towards Better Tomorrow), R.K. Uppal,Mahamaya Publishing House , New Delhi.
4. [WWW.rbi.org.in](http://www.rbi.org.in)
5. <http://innovation.in.csc.com>
6. <http://WWW.allbanksolutions.com>
7. Trends of payment and settlement system in India - by D.Legio Meril ,Southern Economist. (Published Article)

