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EMERGENCE & GROWTH OF E-BANKING IN INDIA: A COMPREHENSIVE OVERVIEW

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ABSTRACT

E-banking, sometimes referred to as digital banking, internet banking, or online banking, is a system that makes it possible to conduct financial activities online, such as money transfers, loan and EMI payments, cash deposits, and cash withdrawals. In today's world, e-banking makes a significant impact to economic growth, especially in emerging nations like India. The focus of banks has changed from conventional banking to the digital banking system. In order to provide their clients with higher-quality services, banks are implementing a variety of strategies and electronic channels. A variety of e-banking methods, including ATMs, debit/credit cards, e-wallets, USSD, NEFT, RTGS, IMPS, UPI etc. are available to quickly and efficiently perform financial transactions. The Indian government has implemented a number of successful measures to encourage electronic banking. The RBI has also established goals to increase the usage of e-banking and cashless transactions in society. The goal of the current study is to examine the development and trend of e-banking methods, particularly with regard to the financial year 2017-2018 to 2021-2022. This study's research method made use of secondary data from online databases of books, academic papers, and relevant articles about e-banking.

KEYWORDS: ***E-banking, Digital banking, Cashless transactions, Economic growth.***

INTRODUCTION

India's banking industry has come a long way. Customers demand innovative products and services. Customers can profit greatly from e-banking by using features like digital access to bank accounts, online financial transfers, online bill payment, etc. The face of banking has evolved as a result of competition, ongoing technological advancements, and changing lifestyles. In the current market, banks are searching for fresh approaches to offer and differentiate themselves from the competitors. Customers no longer want to wait in line at banks or on hold for the most basic services, whether they are corporate or retail. They expect and require the opportunity to carry out their monetary transactions wherever and whenever they desire. With the number of computers growing annually, banks are increasingly finding that providing financial services electronically is the best way to satisfy their customers' needs. Debit cards, credit cards, ATMs, e-wallets, internet banking, UPI, mobile banking, and other choices are now available to customers in place of more conventional methods of transaction. Cheques were the primary means of payment for a long time before technological advancements occurred, and earlier electronic payments could only be sent in large lump sums for high value transactions. Through e-banking, even little payments are now simpler, making it easier for consumers to settle their payments.

MODES OF E-BANKING

i. **ATM (Automated Teller Machine):** The user-friendly, computer-driven ATM is open twenty-four hours a day, seven days a week. It is entirely menu-driven and provides customers with step-by-step instructions on how to use it. A customer can use his ATM card to enter the ATM room and his Personal Identification Number (PIN) to carry out the several transactions, including cash withdrawals and deposits, payment services, user login, receipt of transaction summaries, PIN alteration requests, and updates to personal data. Most ATMs have four output sections and two input sections. Card readers and keypads are input devices, and screens, receipt printers, cash processors, and speakers are output devices.

ii. **Debit or Credit card:** A plastic card called a debit card is utilized as an additional means of payment while making transactions. It functions similarly to an electronic check when money is taken out of an account. A debit card can be used to make ATM withdrawals as well. To secure a debit card payment, a PIN number is utilized. Every user can easily obtain a debit card from the banks, and the card has a transaction threshold of the account balance. Third parties can readily accept it, and there are no additional fees for debit card purchases. The credit card, on the other hand, is a plastic card that the bank issues to the account holder for use in making purchases of goods and services over the outstanding balance. The customer is assigned a credit limit by the issuing bank. For the client, it is equivalent to a cash advance. It functions as a debit card for all transactions, but it also gives the user the option to check the balance of their account. For payments made in excess of the account balance, the bank assesses interest. When making a transaction, the cardholder authorizes payment by signing on the receipt with their card information and paying the balance using their security code. To benefit

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from all credit card benefits, the customer must pay their credit card payments to banks. Customers may also use grace days to settle their invoices.

iii. **BHIM App:** Bharat Interface for Money app uses UPI as its foundation. It was created by National Payment Corporation of India. It is utilized for quick, straightforward, and cheap money transfers between bank accounts. Without placing the money in a wallet, payments can be made using this application. To begin using the service, connect a debit card to the app. The money transfers interface is simple and convenient to use.

iv. **NEFT (National Electronic Fund Transfer):** The RBI oversees this electronic payment mechanism. It was founded in November of 2005. Customers can electronically transfer money from one bank to another by using NEFT, but both banks must support the service. It makes the transmission of funds in batches every six months simpler. There is no upper or lower bound for transferring funds. An electronic message is used for the transfer.

v. **RTGS (Real Time Gross Settlement):** Real time gross settlement is described as executing the transaction as soon as directions are received, as opposed to waiting until later in the day. Gross settlement is the term used to describe the settling of funds transfers based on unique instructions. Money transmitted via RTGS is registered by the RBI, making it a definitive transfer that the transferor cannot reverse. There is no specified max transfer limit; the min limit is 200000 rupees. The bank offers RTGS service during all business days and hours. According to RBI guidelines, the beneficiary's account in RTGS must be credited within 30 minutes of receiving the notice for the money transfer. As a result, it transfers the money as soon as the sending bank sends the transfer request. It truly is a quick method of transferring funds.

vi. **IMPS (Immediate payment service):** In India, it is a real-time, instant interbank electronic money transfer mechanism. National Payment Corporation of India oversees the regulation of IMPS. Mobile phones are utilized to access this service, which is open twenty-four hours a day. Even on major holidays, this service is offered year-round. Using the account number and IFSC code, IMPS can also be completed through online banking.

vii. **USSD:** Unstructured supplementary service data is referred to as USSD. It is a mechanism that GSM cell phone is used to interact with service providers' computers. Prepaid services, mobile money assistance, and menu-based data services can all be utilized for this, as well as to solve phone network issues. A phone number is dialed for the USSD service, and the response is shown on the phone's screen or relayed as a voice message by a computer. This method takes only a few seconds, but it takes many minutes to solve other issues.

viii. **ECS (Electronic clearing services):** It is an electronic method of transferring money from one bank account to another that makes use of clearing house facilities. There are two different types of ECS:

- ECS debit: Amounts paid into one account from many accounts, such as house taxes, water taxes, bills, etc.
- ECS credit: By using ECS, organizations can carry out their high-volume transactions without forgetting or missing the deadlines. Amounts transmitted from one account to another as dividends, interest, remunerations, or pensions are accepted.

LITERATURE REVIEW

Dr. Shankara Patali Y (2014) outlined today's banks operate differently as a result of advancements in technology, competitiveness, and lifestyles. Since consumers no longer need to travel to the bank in person, e-banking allows them to save time & expense. Every bank is aware that in order to exist, they must provide their consumers some form of e-banking. Because clients engage more with offered services when using e-banking, banks are better able to sustain their relationship with customers. It also boosts bank revenues and makes it simple for them to establish a competitive edge through the uniqueness of their banking services, which enhances their reputation.

S. Jothi et.al (2015) in their study showed that customers' perceptions of e-banking are significantly influenced by security and customer satisfaction. In this study, young people viewed e-banking favorably, whereas older clients struggled to keep up with technology. Banks should therefore improve their services to meet the needs of both young and senior consumers. E-banking services should be developed taking into account the needs and challenges of utilizing e-banking for those with low educational backgrounds. People from all walks of life and professions require varied e-banking service characteristics. Expected service features would foster an environment where customers would feel more satisfied and their needs would be met. Banks should therefore develop their online banking services to meet the needs of various business, professional, and income groups.

Reeta & Manju Asht (2016) stated although Indian banks are making sincere efforts to adopt cutting-edge technology and install e-delivery channels, the general public is still sceptical of the idea, and there are still many problems concerning the safety and confidentiality of money and relevant data. As a result, banks should make some special provisions to guarantee the complete security of their customers' funds. Technical errors should be prevented by using qualified and experienced experts in the field of computers to prevent data loss. E-banking services should be tailored based on factors like age, gender, occupation, and others so that people's demands and requirements can be addressed properly.

T. Selvakumar (2017) concluded that Indian banks are transforming their conventional appearance and moving toward digital banking. A positive transformation has occurred in the banking sector as a result of IT advancement. They are attempting to use information technology for banking operations and provide their clients banking goods and services that are based on technology. Indian banks are working to unify their services and products into a single location for its consumers, but in comparison, private and foreign banks operating in the Indian economy are more modernized and offer a wider range of digital services.

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Suhas, D. & H. N. Ramesh (2018) discussed that with the aid of digitalization, we are edging closer to a cashless world, which will improve performance of the banks. Now that banks are aware that a financial system cannot succeed without information technology, the banking sector's contribution to the economy has increased. With the use of electronic banking, all banking services may now be handled swiftly and conveniently. We can see the development in recent years in the installation of ATMs, the issuance of debit and credit cards, NEFT, RTGS, and mobile banking.

B. Bhelly & Dr. Sunil (2019) explained that the sector is transitioning from a seller's market to a buyer's market, and it has finally had an impact on bankers, who have had to adjust their strategies from "traditional banking to convenience banking" and "mass banking to class banking." In the future, e-banking will not only be a preferred method of banking, but also an accepted method. Since the banks that operate globally have identified electronic banking as one of the key strategies for future development, it is evident that electronic banking is gaining ground in newly industrialized countries. With a focus on developing countries, it may be possible to capitalize on opportunities associated to electronic banking channels.

S. Ranjith (2019) observed that E-banking services need to be user-friendly, rapid, simple, quick to access, and convenient. Even if there are numerous obstacles and problems in the way of India's E-Banking system's seamless adoption, E-banking certainly has a promising future because most customers use the E-Banking facility to make payments, shop, and other activities, younger generation has already accustomed to this transition and sees it more as an advantage than a difficulty.

R. Aggarwal & S. Aggarwal (2020) stated that the banking business has seen a significant beneficial transformation thanks to technological innovation. It makes it possible for anybody, anywhere to conduct financial transactions at any time. With only one click, a user can now pay and collect money from any location. Only e-banking makes international commercial transactions viable in this era of globalization. Debit/credit cards, digital cash, mobile banking, EFT, UPI, e-wallets, NEFT, RTGS, IMPS, and other methods are accessible for both normal transactions and financial transfers. It offers banks and clients both ease of use, portability, speed, and convenience. E-tax and DEMAT accounts make it simple to access transactions in the tax and securities industries.

Anil Smriti & Rajesh Kumar (2021) discussed that E-banking will not only be a preferred method of banking in India in the next years, but also an accepted method. Compared to public sector banks, private sector banks account for a larger share of the POS terminal market. Mobile wallets are primarily used in the country to pay for prepaid means of payment. With the accessibility of digital channels, the Government of India and several government organizations are working to increase the safety, security, and dependability of e-banking.

OBJECTIVES OF THE STUDY

- To recognize different e-banking services and products used by Indian banks.
- To give an insight and evaluate the usage of technology in the Indian banking sector.
- To investigate types, growth or progress and scope of e-banking services in Indian banking sector.

RESEARCH METHODOLOGY

The current study is purely descriptive. The secondary data used for the study was gathered from the Reserve Bank of India's bulletin, annual reports, Report on Trend and Progress of Banking in India, as well as a number of reputable journals, newspapers, white papers, and RBI websites.

DATA ANALYSIS & INTERPRETATION

Table 1: Total no. of outstanding cards (Debit/Credit) at the end of the financial year

No. of outstanding cards	As on 31.03.2018	As on 31.03.2019	As on 31.03.2020	As on 31.03.2021	As on 31.03.2022
Debit Card	861076200	905813162	828561639	898201796	917665707
Credit Card	37484955	47088647	57745105	62049087	73627330

(Source: RBI Annual reports)

The number of outstanding cards at the end of the financial year is shown in Table 1. In terms of debit cards, there is an increase in 2019 but a decrease in the number in 2020; nevertheless, after that, we can observe a steady increase in the following years. In terms of credit cards, there is a consistent increasing trend. Table 1 is depicted graphically in Fig 1.

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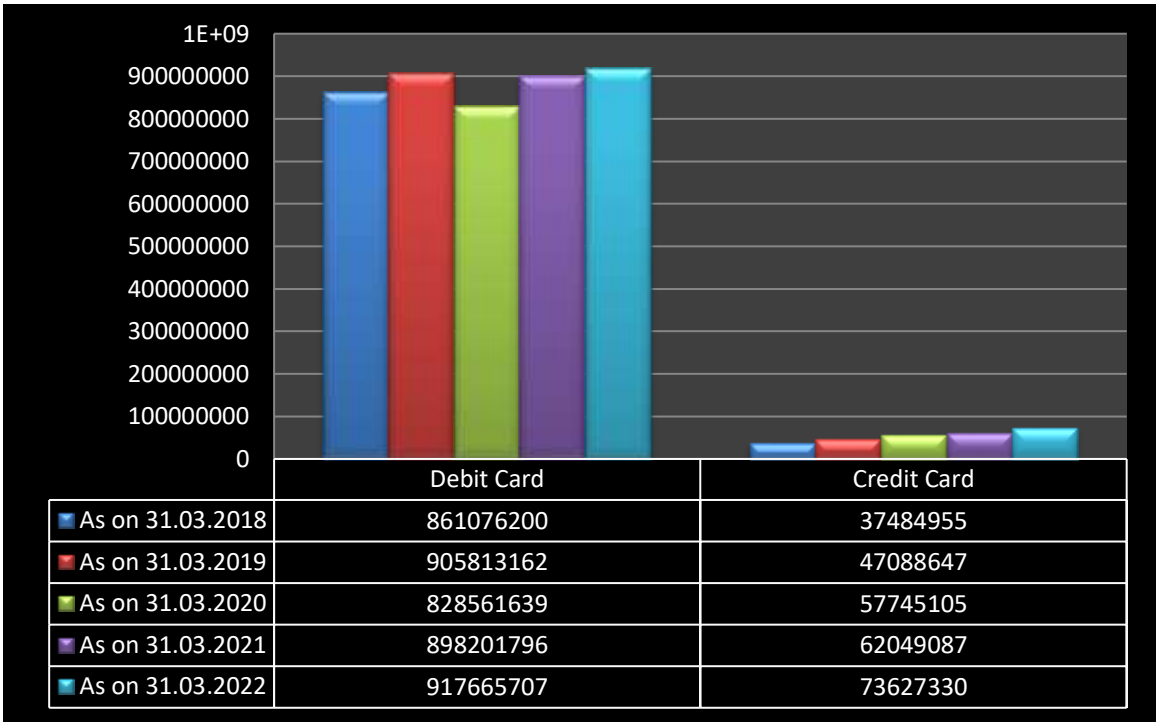

Figure 1: Outstanding no. of debit and credit card as on end of the financial year

Table 2: E-Banking Statistics from Financial Year 2017-18 to 2021-22:

	Financial Year 2017-18		Financial Year 2018-19		Financial Year 2019-20		Financial Year 2020-21		Financial Year 2021-22	
E-banking Services	**Volume (in Mn)**	**Value (in Bn)**	**Volume (in Mn)**	**Value (in Bn)**	**Volume (in Mn)**	**Value (in Bn)**	**Volume (in Mn)**	**Value (in Bn)**	**Volume (in Mn)**	**Value (in Bn)**
NACH	2375.33	9752.88	2861.38	13383.60	3401.77	17629.99	3626.20	19032.78	3821.96	21724.55
IMPS	1009.84	8924.98	1752.91	15902.57	2579.17	23375.41	3278.34	29414.96	4659.70	41686.46
UPI	915.23	1098.32	5353.40	8769.70	12518.62	21317.30	23330.65	41036.54	45967.52	84175.72
RTGS	124.46	1167124.78	136.63	1356881.87	150.7	1311573.17	159.2	1055998.49	206.24	1275076.57
NEFT	1946.18	172228.55	2318.85	227936.03	2744.37	208178.05	3092.79	251309.10	4040.73	268374.69
Mobile Banking	1872.27	14738.52	6200.15	29583.26	13926.27	57815.15	25545	91757.92	50815.30	149915.02
ATM Cash Withdrawal	3503.44	13357.49	4017.41	15125.62	4311.59	16150.98	3661.67	14979.84	3791.86	15753.94
Card Usage (POS)	459.55	488.23	695.02	808.23	822.59	1146.81	701.99	1169.38	843.90	1487.12
Card Usage (eCom)	208.11	166.09	432.06	366.90	658.13	610.40	679.68	926.72	672.46	965.92

(Source: RBI Annual reports)

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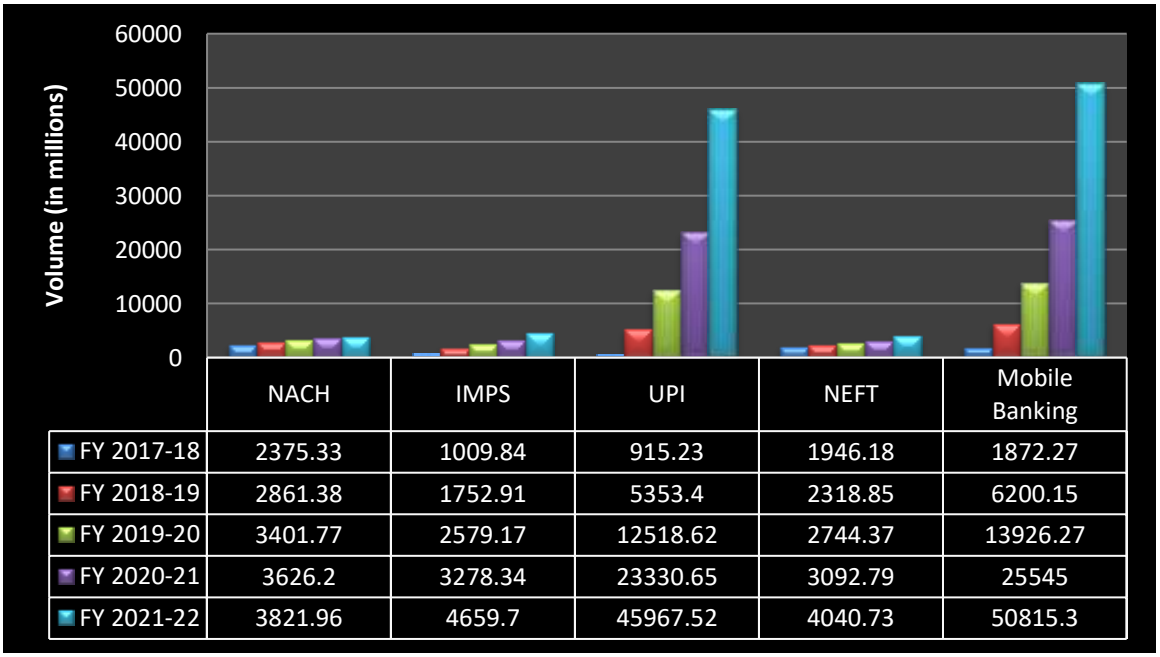
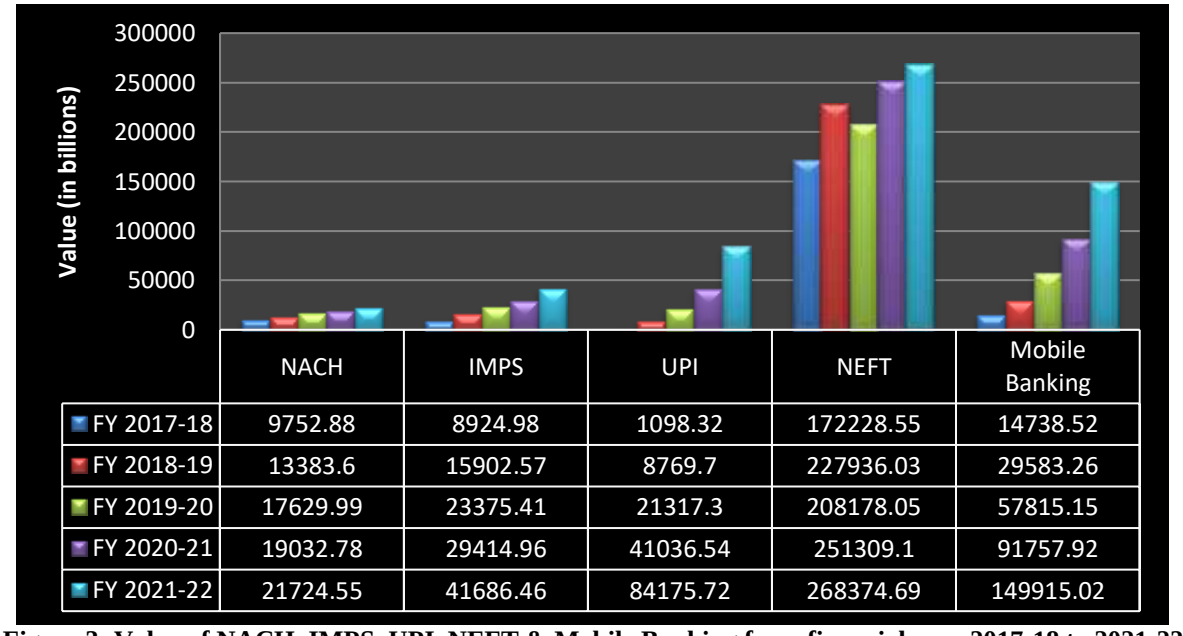


	NACH	IMPS	UPI	NEFT	Mobile Banking
FY 2017-18	2375.33	1009.84	915.23	1946.18	1872.27
FY 2018-19	2861.38	1752.91	5353.4	2318.85	6200.15
FY 2019-20	3401.77	2579.17	12518.62	2744.37	13926.27
FY 2020-21	3626.2	3278.34	23330.65	3092.79	25545
FY 2021-22	3821.96	4659.7	45967.52	4040.73	50815.3

Figure 2: Volume of NACH, IMPS, UPI, NEFT & Mobile Banking from financial year 2017-18 to 2021-22



	NACH	IMPS	UPI	NEFT	Mobile Banking
FY 2017-18	9752.88	8924.98	1098.32	172228.55	14738.52
FY 2018-19	13383.6	15902.57	8769.7	227936.03	29583.26
FY 2019-20	17629.99	23375.41	21317.3	208178.05	57815.15
FY 2020-21	19032.78	29414.96	41036.54	251309.1	91757.92
FY 2021-22	21724.55	41686.46	84175.72	268374.69	149915.02

Figure 3: Value of NACH, IMPS, UPI, NEFT & Mobile Banking from financial year 2017-18 to 2021-22

The volume and value of NACH, IMPS, UPI, NEFT & Mobile Banking are displayed in Table 2 and are depicted in graphical form in Fig 2 & 3 respectively. The volume and value of NEFT and NACH all exhibit a steady rising trend. But in the case of UPI, IMPS and mobile banking, the volume & value consistently exhibit a rapid increase tendency.

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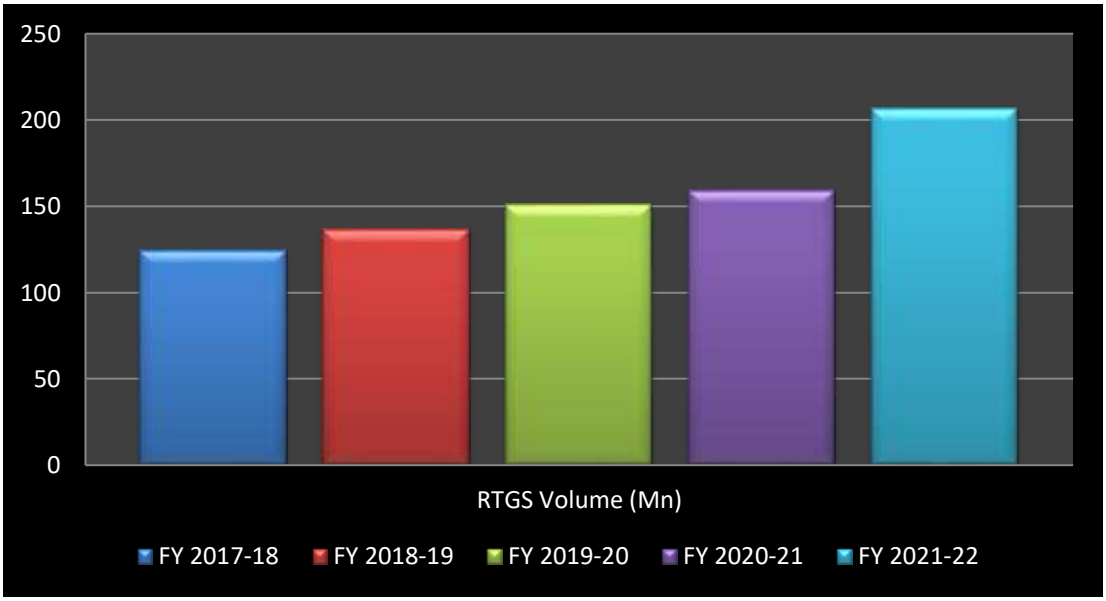

Figure 4: Volume of RTGS from financial year 2017-18 to 2021-22

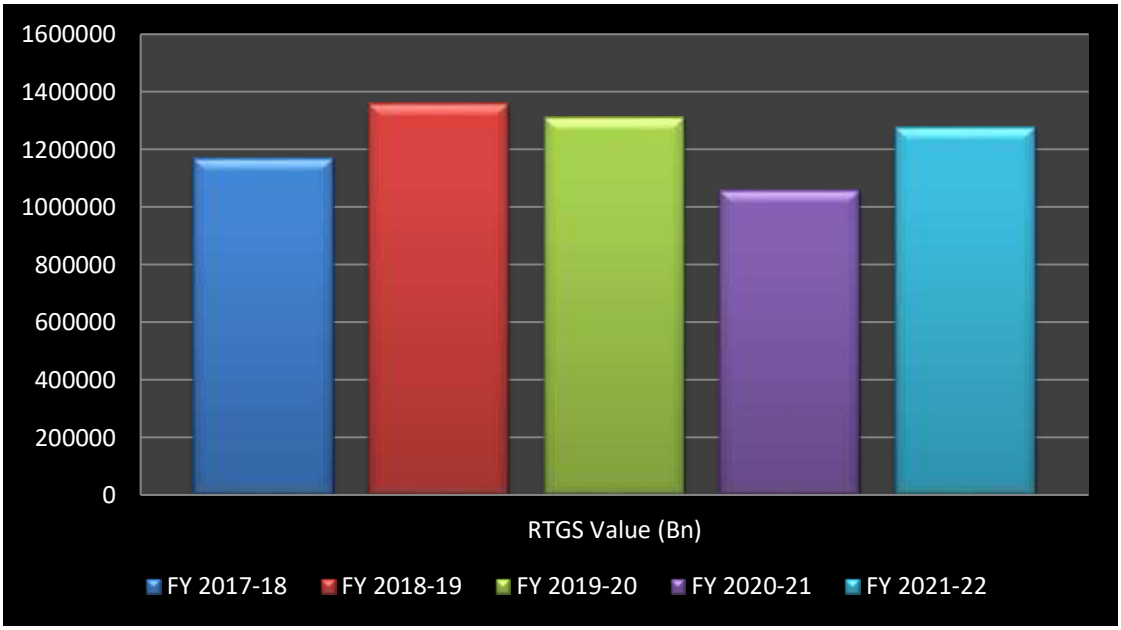

Figure 5: Value of RTGS from financial year 2017-18 to 2021-22

Table 2 lists the RTGS volume and value, which are represented graphically in Figs. 4 and 5 accordingly. The volume of RTGS is increasing each financial year; however, the trend for the value of RTGS is not stable. It is rising in the financial year 2018–19, declining in 2019–20 and 2020–21, and then rising once again in 2021–2022. So, the value of RTGS is showing a dynamic trend whereas volume is showing a steady upward trend.

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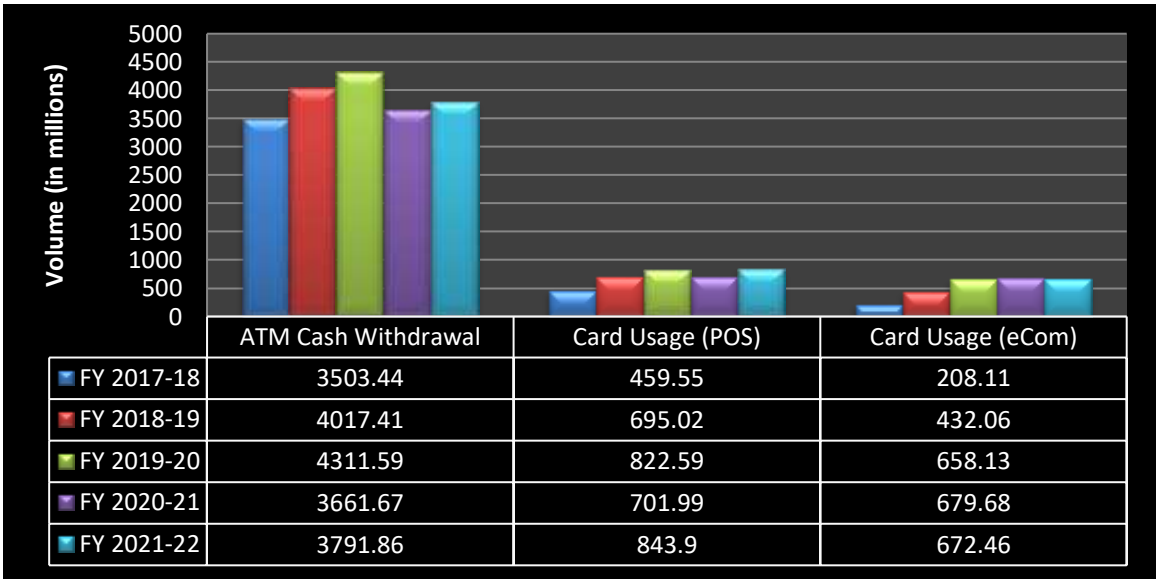
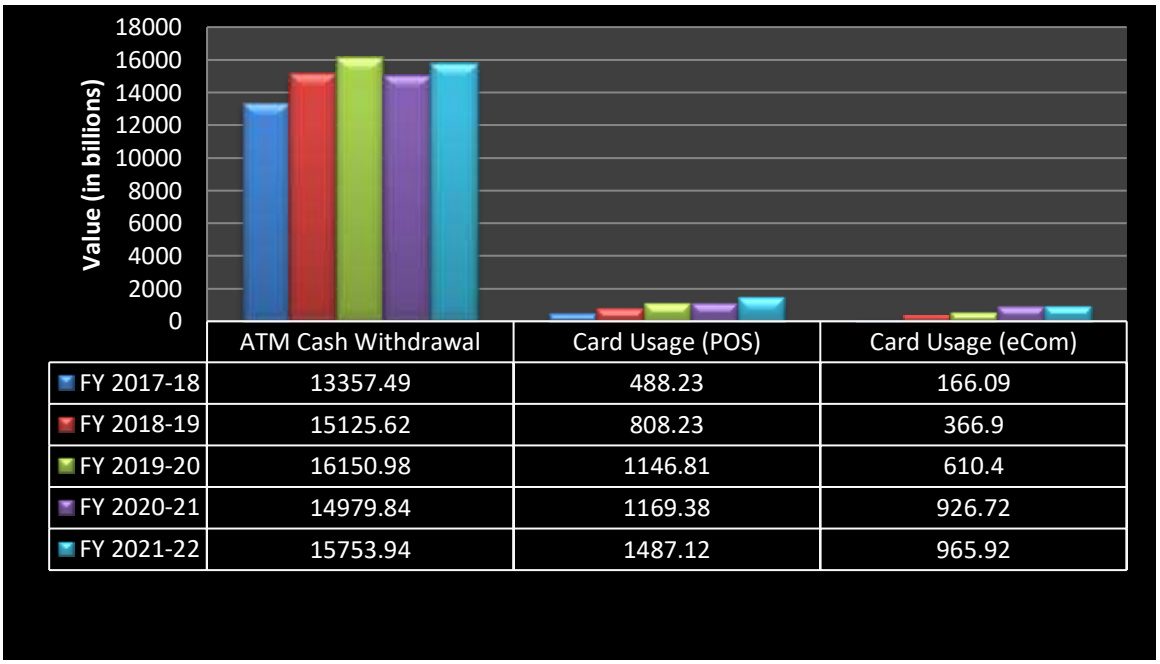


	ATM Cash Withdrawal	Card Usage (POS)	Card Usage (eCom)
FY 2017-18	3503.44	459.55	208.11
FY 2018-19	4017.41	695.02	432.06
FY 2019-20	4311.59	822.59	658.13
FY 2020-21	3661.67	701.99	679.68
FY 2021-22	3791.86	843.9	672.46

Figure 6: Volume of ATM cash withdrawals, Card usage (POS & e-Com) from financial year 2017-18 to 2021-22



	ATM Cash Withdrawal	Card Usage (POS)	Card Usage (eCom)
FY 2017-18	13357.49	488.23	166.09
FY 2018-19	15125.62	808.23	366.9
FY 2019-20	16150.98	1146.81	610.4
FY 2020-21	14979.84	1169.38	926.72
FY 2021-22	15753.94	1487.12	965.92

Figure 7: Value of ATM cash withdrawals, Card usage (POS & eCom) from financial year 2017-18 to 2021-22

The volume and value of ATM cash withdrawals, Card usage (POS) & Card usage (eCom) are shown in Table 2 & are represented graphically in Fig 6 & 7. The data demonstrates that the volume & value of ATM cash withdrawals are increasing in the first two financial years, but in financial year 2020-21 it is falling and again rising in financial year 2021-22, exhibiting a dynamic trend. However, the volume of card usage (POS) almost shows a positive upward trend in all the financial years except in 2020-21 whereas card usage (eCom) shows a similar trend but it is falling in the financial year 2021-22. A consistent upward growing trend has been seen for both the values of card usage i.e., POS & eCom.

CONCLUSION

E-banking is a rapidly expanding idea in the banking industry. The banking business has seen a significant beneficial transformation due to technological innovation. It makes it possible for anybody, anywhere to conduct financial transactions at any moment. It helps the user save time and resources while ensuring transaction accuracy. With only one click, a user can now send and collect money from any location. Only e-banking makes international commercial transactions viable in this era of globalization. Debit/credit cards, IMPS, mobile banking, NEFT, RTGS, UPI, e-wallets, IMPS, and other methods are accessible for both everyday transactions and financial transfers. It offers banks and clients both ease of use, accessibility, efficiency, and safety. In comparison to other e-banking choices; UPI, IMPS, Mobile banking, and card usage

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are all growing tremendously each year, according to RBI data releases. There is not significant increase in ATM cash withdrawals so it indicates users prefer cashless transactions now-a-days. The government is now promoting e-banking, and appropriate rules have been established for the security of financial transactions. E-banking is growing rapidly in India as a result of all these benefits. Digital transactions have quickly superseded cash transactions.

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