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TECHNOLOGICAL INNOVATIONS IN BANKING SECTOR

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ABSTRACT

The keeping money division assumes an imperative part in the advancement of one nation's economy. The improvement of managing an account division relies on the administrations gave by them to the clients in different perspectives. New contestants to the market, new plans of action, changing client desires and discontinuity of conventional administrations are all adding to put customary banks under weight to dispatch new innovation in their operations. The managing an account division in India has seen various changes. The vast majority of the banks begin inventive saving money with protest make more esteem clients. ATM, RTGS, NEFT, Internet managing an account, Mobile saving money, SMS Banking and check truncation framework are some current developments. Be that as it may, there are some new advancements utilized by the non-saving money establishments and couple of outside banks. These new advancements might be gotten by the Indian banks. Along these lines, this paper illuminates the information light on new advancements in managing an account area.

KEYWORDS: Banking Sector, New innovations, Banking products and services, Digital technologies, E-economy

INTRODUCTION

The money related advancement in Indian managing an account industry happened after the nationalization of 14 noteworthy planned banks in July, 1969 and 6 in April, 1980. In the 1990s, the saving money area in India put more prominent accentuation on innovation and advancement. At present Indian saving money part is adequately promoted and all around directed. There are 26 open division banks, 25 private area banks, 43 remote banks, 56 territorial provincial banks, 1,589 urban agreeable banks and 93,550 country helpful banks. National bank allowed endorsement to 11 installments banks and 10 little back banks in FY 2015-16. Standard and Poor's (S and P) assesses that credit development in India keeping money division would enhance to 11-13 for each penny in FY17. The eventual fate of Indian bank looks energizing as well as transformative. India's managing an account area could turn into the fifth biggest saving money part on the planet by 2020 and the third biggest by 2025. In future, innovation will make the engagement with banks more multi-dimensional proceed to create and extend managing an account administrations. Indian banks sent innovation based answers for raise income, upgrade client encounter, streamline cost structure and oversee association hazard. Be that as it may, there is a wide change in the innovation execution capacity crosswise over various players of the managing an account industry.

FINANCIAL INNOVATION

Money related advancement is critical to survival of banks in contemporary saving money environment. The significance of monetary development is broadly perceived. Many driving researchers, including Miller (1986) and Merton (1992), have highlighted the significance of items and administrations in the budgetary field. Creative thoughts are show in various businesses and in various structures. For instance advancement in item improvement is one of the types of development that has been utilized by banks. Appropriate from the earliest starting point phase of monetary modernization developments have been assuming significant parts in reducing money related prohibitions and enhancing the ways managing an account administrations are rendered to individuals. Budgetary advancement is one of the normally utilized saving money phrasings. It has been utilized to portray any adjustment in the scale, extension and conveyance of money related administrations. The deregulation of money related administration industry and expanded rivalry with in speculation managing an account without a doubt prompted to expanded accentuation on the capacity to plan new items, grow better process, and execute more viable answer for

progressively complex monetary issues. These monetary developments are a consequence of number of Government directions, impose strategies, globalization, advancement, privatization, mix with the worldwide money related market and expanding hazard in the local budgetary market. Budgetary advancement is the procedure through which fund directors or middle person organizations in money related markets increase the value of existing plain vanilla items that fulfill the client needs. As per John Finnerty, "Money related Innovation includes the plan, the advancement, and the execution of inventive budgetary instruments and forms, and the definition of imaginative answers for issues in fund". The different advancements in saving money and budgetary part are ECS, RTGS, EFT, NEFT, ATM, Retail Banking, Debit and Credit cards, free counseling administrations, installments of service bills, finance exchanges, web managing an account, phone saving money, portable keeping money, offering protection items, issue of free checks books, travel checks and numerous more esteem included administrations. Serious rivalry among the banks has re-imagined the idea of the whole keeping money framework. The banks are searching for new ways to pull in as well as to hold the clients and increase upper hand over their rivals. The banks like different business associations are conveying inventive deals methods and propelled advertising devices to pick up matchless quality. The primary driver of this change is changing client needs and desires. Clients in urban India no longer need to hold up in long lines and invest hours in saving money exchanges. This adjustment in client state of mind has run as an inseparable unit with the advancement of ATMs, Mobile telephone and net keeping money alongside accessibility of administration comfortable client's doorstep. With the development of all inclusive managing an account, banks mean to give all saving money item and administration offering short of what one rooftop and their attempt is to be client driven. While banks are endeavoring to reinforce client relationship and move towards 'relationship saving money,' clients are progressively moving far from the bounds of customary branch saving money and looking for the comfort of remote electronic managing an account. Data innovation and the correspondences organizing frameworks have progressives the working of banks and money related substances everywhere throughout the world.

OBJECTIVE OF THE STUDY

The objective of the study is to highlight the new innovations in the banking sector at the national and international level banks.

RESEARCH METHODOLOGY

The research is mainly based on secondary data. Data has been collected from different sources like scholarly articles, annual reports of the selected banks, newsletters, and various web sites.

INNOVATIONS IN BANKING SECTOR

Saving money industry in India has likewise accomplished another stature with the evolving times. Client administrations and consumer loyalty are prime obligations of banks now days. Data innovation has offered ascend to new developments in the item outlining and their conveyance in the saving money and fund businesses. Innovation offers a possibility for banks to assemble new frameworks that address an extensive variety of client needs including numerous that may not be comprehensible today. Managing an account through web has developed as a vital asset for accomplishing higher proficiency, control of operations and lessening of cost by supplanting paper based and work concentrated strategies with mechanized procedures in this way prompting to higher efficiency and gainfulness. Monetary development related with mechanical change completely changed the keeping money rationality and that is further tuned by the opposition in the managing an account industry. Testing business environment inside the saving money framework make more advancement in the fields of item, process and market.

**NEW INNOVATIONS IN BANKING SECTOR
ATM**

A mechanized teller machine (ATM) is a modernized media communications gadget that gives a budgetary organization's clients a protected strategy for performing monetary exchanges in an open space without a human agent or bank employee. ATM can be inside (i. e., situated in the branch premises) or outside (found anyplace outside the branch premises). Banks require not acquire authorization of the RBI for establishment of ATMs at branches and expansion counters for which they hold licenses issued by the Reserve Bank. They can likewise introduce offsite ATMs without RBI endorsement. In any case, they ought to get a permit from the provincial office of DBOD (Department of Banking Operations and Development) of RBI, before operationalizing the ATM, in order to be in similarity with area 23 of the Banking Regulation Act. The entrance of ATMs the nation over expanded in 2012-13 with the aggregate number of ATMs intersection 1, 00,000, timing a twofold digit development amid the year This development was driven basically by private area banks, with their partake in all out ATMs getting quickly to around 38 for every penny. Likewise Over the years, the relative development in off-site ATMs has been significantly more than that of on location ATMs. Subsequently, by 2012-13, off-site ATMs represented the greater part the aggregate.

ATMs in the country as shown in Table 1

1 S R.NO	2 BANK GROUP	3 ON SITE ATM	4 OFF-SITE ATM	5 TOTAL ATM
A	Public sector bank	40241	29411	69652
	Nationalized bank	20658	14701	35359
	SBI Group	18708	13883	32591
B	Private sector Bank	15236	27865	43101
	• Old private generation bank	4056	3512	7566
	• New private generation bank	11182	24353	35535
C	Foreign Bank	283	578	1261
D	All SCB's(A+B+C)	55760	58254	114014

Debit Card and Credit Card

A plastic is an electronic card issued by a bank which permits bank customers access to their record to pull back money or pay for merchandise and enterprises. This evacuates the requirement for bank customers to go to the bank to expel money from their record as they can now simply go to an ATM or pay electronically at vendor areas. This sort of card, as a type of installment, additionally expels

the requirement for checks as the plastic quickly exchanges cash from the customer's record to the business account.

A Credit Card is issued by a monetary organization giving the holder an alternative to obtain stores, for the most part at purpose of offer. Credit cards charge intrigue and are basically utilized for here and now financing. Intrigue more often than not

starts one month after a buy is made and acquiring points of confinement are pre-set by the individual's FICO assessment.

NEFT

As indicated by Reserve Bank of India, National Electronic Funds Transfer (NEFT) is an across the nation installment framework to encourage balanced assets exchange. Under NEFT, people, firms and corporate can electronically exchange stores from any bank office to any individual, firm or corporate having a record with whatever other bank office in the nation taking an interest in the Scheme. The assets under NEFT can be exchanged by people, firms or corporates keeping up records with a bank office. Indeed, even people not having a financial balance can store money at the NEFT-empowered branches with directions to exchange reserves utilizing NEFT. In any case, such money settlements will be confined to a most extreme of Rs.50, 000/- per exchange.

Such stroll in-clients need to outfit full subtle elements including complete address, phone number, and so on. NEFT, along these lines, likewise help in exchange of assets even without having a financial balance. This is a basic, secure, sheltered, quickest and financially savvy approach to exchange finances particularly for Retail settlements. RTGS Real Time Gross Settlement system(RTGS), presented in India since March 2004, is a framework through which gadgets guidelines can be given by banks to exchange reserves from their record to the record of another bank. The RTGS framework is kept up and worked by the RBI and gives a method for proficient and quicker finances exchange among banks encouraging their money related operations. As the name proposes, stores exchange between banks happens on an 'Ongoing' premise. Accordingly, cash can achieve the recipient promptly and the recipient's bank has the duty to credit the recipient's record inside two hours.

Web Banking

It is an administration gave by banks with the goal that individuals can discover data about their ledger, pay bills and so forth utilizing the Internet. Web Banking permits you to lead bank exchanges on the web, rather than finding a bank and cooperating with a teller. In a wide sense, it is the utilization of electronic intends to exchange supports straightforwardly starting with one record then onto the next, as opposed to with check or money.

DEMAT

Demat account, the contraction for dematerialized record, is a sort of managing an account record which dematerializes paper-based physical stock shares.

In-auto applications

Spanish budgetary foundation Caixa Bank has made the primary portable managing an account application that can be gotten to while driving, utilizing voice control usefulness. The innovation utilized by CaixaBank application, called Línea Abierta BASIC. Drivers can make adjust enquiries and exchanges, and find close-by branches and ATMs, by talking into their Android gadget.

Facial recognition technology

A facial acknowledgment framework is a PC application equipped for recognizing or checking a man from an advanced picture or a video outline from a video source. There are many sorts of validation for banks and installment firms to consider however, and Chinese online business firm Alibaba trusts that installments could be made with a grin. HSBC is the principal bank who embrace the facial acknowledgment innovation.

Google Glass technology

Banco Sabadell in Spain got to be distinctly one of the principal banks to make a retail Google application that permitted clients to find the closest ATM, check account adjusts, and utilize video conferencing for specialized support. Spanish money related firm, Caixa Bank has also effectively built up a Google Glass application. It works by super forcing bearings to the closest branch onto the Glass screen, giving data such separation and telephone number of the closest branch, all of which is gotten to through the voice acknowledgment framework.

Artificial intelligence (AI)

Manmade brainpower is a territory of software engineering that accentuates the production of smart machines that work and respond like people. PCs can perform exercises like discourse acknowledgment, Learning, Planning and Problem tackling with AI. Swiss managing an account goliath UBS went into a business concurrence with programming seller Sqream, which crunches gigantic volumes of data about a customers conduct to offer them nitty gritty, customized in organization.

Table 2: Latest apps launched by Indian banks

Axis bank	Airtel Money, Kisan card
SBI	BOUTIQUE FINANCING SCHEME, Twitter Handle account, E-KYC
ICICI Bank	Branch on Wheel
Kotak Mahindra Bank	Facebook-based funds transfer platform –KayPay
BOI	Instant money transfer Indusuld & federal bank Video Conferencing
Laxmi Vilas Bank	LVB Mobile' app
Yes Bank	Yes Mobile 2.0 mobile bank app
Canara Bank	M-Wallet
Hdfc Bank	Chillar, watchbanking

CHALLENGES IN BANKING SECTOR

Creating nations like India, has countless who don't have admittance to keeping money benefits because of scattered and divided areas. In any case, on the off chance that we discuss those individuals who are profiting saving money benefits, their desires are raising as the level of administrations are expanding because of the development of Information Technology and tremendous rivalry between the administrations and items gave by various banks. Since, remote banks are playing in Indian market, the quantity of administrations offered has expanded and banks have laid accentuation on meeting the client desires. India's keeping money segment has made fast walks in improving and adjusting itself to the new focused business environment. The real difficulties confronted by banks today are regarding how to adapt to aggressive powers and reinforce their accounting report. Today, banks are moaning with weight of NPA"s. It is appropriately felt that these defiled obligations, if not recuperated, will eat into the very vitals of the banks.

CONCLUSION

The Banking part in India has turned out to be more grounded as far as capital and the quantity of clients. It has turned out to be all around aggressive and different pointing, at higher profitability and effectiveness. Presentation to overall rivalry and deregulation in Indian money related part has prompted to the rise of better quality items and administrations. Changes have changed the substance of Indian keeping money and back. The saving

money division has enhanced manifolds as far as Technology, Deregulation, Product and Services, Information Systems, Etc. The pre and post advancement period has seen different ecological changes which specifically influences the previously mentioned marvels. It is apparent that post progression time has spread new shades of development in India, however all the while it has additionally represented a few difficulties. Banks need to receive a comprehensive way to deal with satisfy the constantly changing requirements of clients and to snatch a superior piece of the overall industry. Advancement of complex items with ease innovation is the key. This calls for inside and out examination of client needs the market and contender patterns. This investigation assumes an essential part in formulating new methodologies, items and administrations. The better the banks comprehends their clients, the more effective they will address their issues.

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