Digital Revolution in the Indian Banking Sector

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Abstract
“Digital” is the new popular expression in all sectors. With other sectors, banking is additionally all around the world moving towards digitalization. Banks all things considered and over all areas are making immense investments in digital activities so as to keep up a competitive edge and convey the greatest to its customers. Selection of digitalization is significant for the banking sector. By grasping digitalization, banks can provide upgraded customer services. This provides accommodation to customers and aides in sparing time. Digitalization has transformed manual processes, transactions and exercises into digital services. Over all verticals, buyer needs have been met in entirely imaginative manners, upsetting existing enterprise esteem chains. Digitalization reduces human blunder and in this manner constructs customer unwaveringness. Today, individuals have nonstop access to banks due to online banking. Managing a lot of cash has additionally become simpler. Digitalization has additionally profited customers by encouraging cashless transactions. Customers need not store cash any longer and can make transactions at wherever and time. A few commercial banks began moving towards digital customer services to stay competitive and relevant in the race. Banks have profited in a few different ways by receiving more current innovations. E-banking has brought about reducing costs definitely and has created revenue through different channels. Commercial Banks in India have moved towards innovation by method for Bank Mechanization and Automation with the prologue to MICR based check processing, Electronic Funds transfer, Inter-availability among bank Branches and implementation of ATM (Automated Teller Machine) Channel have brought about the accommodation of Anytime banking. Solid activities are taken by the Reserve Bank of India for reinforces the Payment and Settlement systems in the banks. Indian government, banks, fintech companies have been advancing and changing the manner in which India spends its money. Simultaneously digital revolution additionally raises new challenges to the solidness and the uprightness of the financial system and the protection of buyers. Hence, the present study has been done on the digital revolution in the Indian Banking sector and the study based on the secondary sources of data.

Keywords: Digi-world, Technologies, Digital Financial Services, Fintech Companies, Bank Mechanization & Automation, Digital Evolution and Revolution.

Introduction
New developed and implemented advancements change the manner in which individuals act and communicate in their regular day to day existence. They are changing the business world strategic setting, by modifying customers’ conduct and desires, business direct and structure of competition, so the banking business is no special case by any stretch of the imagination. A great many people in the banking sector concur that digital banking is the flood of things to come. “Digital banking” regularly gets mistook for portable banking and online banking, in light of the fact that all these include digital applications, in some structure. Digital Banking is desperation, not a scholastic inquiry, and these days digital change goes past banking. Digital banking is the joining of new and developing innovations all through a financial services entity, working together with related changes in inside and outer corporate and faculty connections, to provide upgraded customer services and encounters successfully and efficiently.
The movement to a digital banking world won’t be smooth and will prompt further fragmentation in the financial service markets. Banks must experience a more profound alteration of their business, culture, and IT, or more all, will require put advancement at its center and use information to make new business, revenue and customer engagement.

The challenge has a name Digital Revolution and it is essentially complex for banks, as in they need to “battle” in two fronts: the digitization and the digitalization. In the event that the previous front is instinctively comprehended, saw and consequently translated into well-defined operational strategies, many years prior with the proliferation of internet, the last one is undeniably progressively burdensome, enduring and unsafe, up to the point of business endurance. Digitalization makes new worth dependent on digital resources and abilities. Most banks are dealing with the main viewpoint however have the chance to promote develop the second one also. Without a doubt, digitalization goes past just subbing simple or physical resources with their digital partners. Digitalization catches the idea of digital evolution to change business models and the connection between customer esteem and company revenue.

Digitization is the transformation of information into a digital structure with the reception of innovation. Digitization reduces human mistakes and, in this way, customer unwaveringness. Banks all things considered and in all districts are making huge investments in digital activities so as to keep up a competitive favourable position and offer the greatest to their customers. Likewise, digitization prompts insight and knowledge of strong information, which causes banks to approach customers and get closer to the competition. By embracing digitization, banks are currently providing better customer services. This provides comfort to customers and enables spare to time. Today, individuals have access to banks 24 hours due to online banking. Managing a lot of cash has additionally become simpler. Digitization has additionally profited customers by encouraging transactions without cash. Customers never again need to store cash and can make transactions anyplace, whenever. It is a ground-breaking, particular and open digital support stage that enables individuals to help readiness and speed. The principle steps of the digital banking process have focused primarily on adding to the current offer the utilization of new services empowered with innovation to build accessibility and incentive for customers. In this study it is focuses on the revolution of digitalization on Indian Banking sector, which is a significant worry with the required services provided by the bank to its customers.

Research Objectives
The present study aimed with following objectives:
1. To study the evolution of Digitalization in Indian Banking sector.
2. To know about progress and scope for Digital Banking in India.
3. To narrate the reasons for banks adopting digitalisation.
4. To elaborate the challenges of digitalising banking activities in India and suggestions to overcome the digital banking challenges.

Operational Definitions
Digital banking is the digitization (or moving online) of all the traditional banking exercises and programs that verifiably were just accessible to customers when physically within a bank branch. This incorporates exercises like: Money Deposits, Withdrawals, and Transfers. Checking/Savings Account Management.

The digital revolution is disturbing the connection among banks and their clients and new highlights constantly seem to upgrade customer experience.

The digital revolution has moved from ‘existential danger’ to ‘potential endurance strategy’ for traditional banking providers.

Reviews of Related Literature
Vijai, C. (2019) has studied that the Artificial Intelligence (AI) is a quick developing innovation over the world. The banking sector is becoming one of the principal adopters of Artificial Intelligence. Banks are investigating and implementing innovation in different manners. Man-made consciousness is showing signs of improvement and more astute step by step. In this paper, we will discuss how
Artificial Intelligence is utilized in the Indian banking sector, what are the advantages and what are the Challenges confronting India’s Artificial Intelligence. Developing that Artificial Intelligence offers to FinTech and the different manners by which it can improve the tasks of an Indian banking sector.

Omarini, Anna. (2017) has examined that the Digital Transformation in Banking and The Role of FinTechs in the New Financial Intermediation Scenario. One of the fundamental changes in the business is becoming digitalization which is seeing a profound transformation to the banking system. Digitalization offers new open doors for banks to put the customer at the center of the development process. New innovations appear to be and remain in the market to upset the retail financial service esteem chain, just as bringing new players into the competitive field. Incumbents and new comers have imaginative switches to embrace. The powers forming these progressions have come out on top to reconsider the job of banking and finance, more as an “empowering influence” than a provider of products and services. The article targets defining digital transformation in the banking business, laying out what banks and FinTech companies are both developing in the market, and furthermore bringing up that it won’t be simply the innovation that will be the disruptor of the banking business, yet rather how firm sends the innovation that will cause the disturbance.

Tater et al. (2011) has inspected that the impression of Indian customers towards the utilization of advances as for such factors as comfort, protection, security, convenience, ongoing accessibility, and accurate record of shifted transaction that empower customer’s selection of Banking Technology. Different factors, for example, slow transfer speed, specialized disappointment, cheats and ignorance among customers that make obstruction in appropriation, are additionally tried. The outcomes show that statistic factors, for example, sex, age, capability and income assume a positive job in reception of banking innovation. All the banks are utilizing data innovation as a strategic vehicle to remain competitive against different players. There is no huge contrast between reception paces of banking advances by the customers of different privatee banks. The paper likewise shows that banking innovation helps in expanding customer satisfaction, customer steadfastness, improvised development, and performance of the banks.

Evolution of Digitalization in Banking Sector

In the late 1980s, to improve customer service, accounting and record keeping the requirement for computerization was felt in the Indian banking sector. At that point in 1988, the Reserve Bank of India built up a committee to study Computerization in bank headed by Dr. C. Rangarajan. The process of computerization picked up pace with the change in the Indian economy in 1991-92. One of the primary drivers of this change was driven by the developing entries of privatee and outside banks in the Banking business. A few commercial banks started to move towards digital customer service to stay competitive and relevant in the race. The Commercial Banks in India have moved towards innovation through the Mechanization and Automation of the Bank with the prologue to cheaque processing dependent on MICR, the electronic transfer of assets, the interconnection between bank branches and the implementation of ATMs (ATM) have brought about the comfort of at any banking time. The Reserve Bank of India has taken solid activities to reinforce payment and settlement systems in banks. Presently the Indian government is forcefully promoting digital transactions. The dispatch of United Payments Interface (UPI) and Bharat Interface for Money (BHIM) by National Corporation of India (NPCI) are significant strides for advancement in the payment systems area. UPI is a portable interface where individuals can make moment transfers of assets between accounts in different banks based on a virtual location without mentioning the bank account. Indian banks are currently buckling down for providing following offices to their customer for expanding their banking business, for attracting more customers and so on.

Automatic Teller Machine (ATM)

The ATM is the most famous device in India, which enables customers to pull back their money 24 hours every day, 7 days per week. With the utilization of ATM card customer can perform routine banking transactions without collaborating with a human
cashier. Aside from cash withdrawals, ATMs can be used for paying service bills, transfer assets between accounts, store checks and cash, balance requests, and so forth.

**Telebanking**

Telebanking encourages the customer to do banking transactions not identified with cash telephone. According to this structure, the programmed voice recorder is utilized for easier transactions and questions. For complicated requests and transactions, manned telephone terminals are utilized.

**Electronic Compensation Service (ECS)**

The Electronic Compensation Service is a retail payment system that can be utilized to make mass payments/receipts of a comparative sort, particularly when every individual payment is of a competitive sort and of a sum generally minor. This service is helpful for associations and government administrative divisions to make/get enormous volumes of payments as opposed to making transfers of assets by people.

**Electronic Funds Transfer (EFT)**

Electronic Funds Transfer (EFT) is a system where any individual who needs to make payments to someone else/company, and so forth one can approach bank and make cash payments or offer guidelines to transfer reserves legitimately from his/her account to the recipient/recipient’s bank account. Full subtleties, for example, the recipient’s name, bank account number, sort of account (reserve funds or current account), bank name, city, branch name, and so on they should be provided to the bank at the moment of mentioning such transfers with the goal that the measure of the recipients’ account is right and quicker. RBI is the EFT service provider.

**Real-time gross settlement (RTGS)**

The real-time settlement system, through the banks gives electronic guidelines to transfer assets from their account to another bank account. The RBI keeps up and works the RTGS system and provides efficient and quicker methods for transferring assets between banks that encourages its financial tasks. As the name proposes, the transfer of assets between banks is done continuously.

**Point of sale terminal**

Retail location terminal is a computer terminal that is associated in line to the computerized records of customer data in a bank and magnetically encoded plastic transaction card that identifies the customer with the computer. During a transaction, the customer’s account is charged and the computer credits the retailer’s account for the measure of the buy.

**Progress and Scope For Digital Banking in India**

India’s push to assemble a less-cash economy is by all accounts gathering momentum with the central bank recording a phenomenal development in digital transactions till March 2019 and setting a driven objective to push up the volumes by multiple times by 2021. All out digital transactions in volume terms recorded a development pace of 58.8 per cent during 2018-19, over a development of 50.4 per cent during 2017-18, the Reserve Bank of India said in a report. The RBI says digital transactions in esteem terms developed by 19.5 per cent during 2018-19, compared to the development of 22.2 per cent during 2017-18. Despite the fact that the greater part of digital transactions in esteem terms (82.8 per cent) are accounted for by RTGS transactions, retail component of digital transactions (barring RTGS customers and interbank transactions) saw a volume development of 59.3 per cent during 2018-19, as against 50.8 per cent development in the previous year.

Given the current pattern under tight restraints utilization and the push to move to digitised transactions, the RBI’s vision document expects the volume of registration payments would be under 2.0 per cent of the retail electronic transactions by 2021. Payment systems like the Unified Payment Interface (UPI) are probably going to enroll normal annualized development of more than 100 for every cent and NEFT at 40 for each cent over the vision time frame. The quantity of digital transactions is relied upon to build multiple occasions from Rs 2,069 crore in December 2018 to Rs 8,707 crore in December 2021, it says. “In esteem terms, retail transactions developed by 38.2 per cent, over 45.8
per cent development a year ago. They accounted for 99.4% and 17.2% of all out digital transactions volume and worth, separately,” the RBI said in its report ‘Payment and Settlement: The Plumbing in the Architecture of India’s Financial System’. The central bank report says, throughout the years, the payment and settlement scene has seen unprecedented rushes of advancement. “Versatile wallets have truly made banking services accessible ‘on tap’; digital-just banks have discarded the requirement for physical nearness. Biometric authentication has made doing transactions a lot more secure and more convenient than the conventional methods of payment. Blockchain might be a potentially troublesome innovation however it is making solid tailwinds in the area of payments for robotizing and decentralising financial transactions,” it said.

Another mechanical wave is being created by the use of man-made consciousness (AI) to financial innovation, or fintech, industry as mechanized information investigation, chatbots and robo-advisers. Man-made intelligence is being utilized to distinguish misrepresentation by checking examples of customer conduct. Close to handle communication (NFC) innovation and central bank digital monetary standards (CBDCs) are other way breaking advancements that have developed into the payment and settlement scene, the central bank has said. According to the RBI, volumes under UPI, a moment ongoing payment system, arrived at a pinnacle of 799.5 million in March 2019, 4.5 times the volume in March 2018. For the financial as entire, the all out UPI volume was multiple times bigger than the volume during 2017-18. As far as worth, UPI transactions saw an eight-overlay increment over the previous year. The normal worth per transaction remained at Rs 1,670 in March 2019, the RBI said. UPI is a quick money transfer system that empowers nonstop interbank support transfer, consistently. Since its commercial dispatch in August 2016, it has seen a mammoth ascent in volumes by a wide margin surpassing the transactions done on the IMPS stage.

The volume of cards in retail location transactions became 30.1 per cent during 2018-19 (36.2 per cent a year ago) and in esteem terms, by 30.2 per cent (39.6 per cent a year ago). During 2018-19, check cards developed by 19.5 per cent and 16.3 per cent in volume and worth terms (9 for every cent and 24.9 per cent a year ago), the RBI says. Nonetheless, charge cards saw higher development of 25.4 per cent and 31.4 per cent in volume and worth, individually, during 2018-19 (29.2 per cent and 39.7 per cent a year prior). “Despite the fact that ATM use accounted for significant portion of charge card transactions (69.1 per cent in volume and 84.8 per cent in esteem), there is prof of increment in utilization of check cards at PoS consistently, from 4 for every cent in 2011-12 to 15 for each cent in 2018-19 in esteem terms,” it said. During 2018-19, check card PoS utilization developed by 32 for every cent and 29 for each cent for volume and worth, separately (39.3 per cent and 39.5 per cent a year prior). The Reserve Bank is currently pushing for a 34 for each cent increment in PoS terminals to 50 lakh in vendor establishments, principally including 44 for every cent of complete platinum card transactions, in the following two years while focusing on “cash-light economy” and digital modes for e-commerce.

Reasons For Banks Adopting Digitalization
There are various reasons which could give a few clarifications for this conduct, yet probably the most significant and affecting elements, causing a profound effect on the digital transformation of financial services are the accompanying patterns:

The Development of New Technologies
The quick development of new advancements, Internet, cell phones and tablets, in under 10 years, alongside the challenge of new entrants (working digital-just products and services) and new models, adds another dimension to the changing job of banking. Innovation companies and new companies quickly grow their exercises to financial services, consistently developing and competing or working together with banks and other financial establishments in different segments of the financial markets or in exercises that don’t explicitly require a banking permit. This adds to pushing banks to re-examine the manner in which they work.

The Change of Customer Expectations
The change is likewise coming from new customer desires. The present customers are not
equivalent to they were ten years prior. Their desires towards products and services have changed in only a couple of years. Digital buyers have a place with the digital local age, brought up with Internet: the age conceived somewhere in the range of 1977 and 1994 thought about noteworthy innovation savvy, presented to innovation since early youth and impenetrable to most traditional marketing; and the age conceived in the mid-90s to mid ‘00s, accustomed to a media and online environment in which alternatives are practically boundless.

The two ages are incredibly associated and depend intensively on cell phones/applications and even wearable to appreciate the best customer-experience or advantage from the most well known content. They adjust rapidly to new changes and consistently look for data or guidance on the Internet or social networks. These digital shoppers demand more decisions, quick accessibility and direct access to prepared to-utilize data and services. They anticipate quick, sheltered and straightforward banking products and services. They need banks to provide more than simple transactional ser-indecencies and anticipate that they should comprehend their needs and to go about as trusted advisers.

Challenges Involved in Digitalizing Banking Activities In India

Here are the Challenges to the digital banking and recommended ways for how to overcome them are discussed.

Attaining App Perfection

There is an immense feeling of intensity and consolation while accessing a Smartphone application. Cell phones are progressively close to home in nature, progressing to biometric check, in any event, for activities, for example, opening the screen. Bringing this into account, developing applications identified with a business becomes significant so as to hold customers. With banking and financial applications progressively offering the comfort and extravagance of observing costs whenever from wherever, associations that don’t take advantage of this area will surely miss out on many people that will consider the enterprise obsolete. Nonetheless, most applications are frequently ridden with bugs and face serious performance issues. They stay hard to explore, on occasion, and frequently crash. This can be detrimental to the company’s progress as it would represent low quality.

Technology Upgrades

Hardly any years back, Smartphone small just barely becoming mainstream. Today, the usefulness to a great extent defines the device that is claimed. The individuals who travel frequently on business rely upon Apple and Android tablets, the individuals who function as consultants rely upon excellent cameras and digital note pads, while the individuals who work the 9-to-5 routine favor robust workstations and high-performance work areas. What’s more, we have products like Amazon Echo tossed in the blend, for every day cautions and to liven up the general way of life. Knowing which crowd to target is just its half; understanding who might utilize what device under which conditions is similarly significant. This implies a serious measure of investment for banking and financial entities in digital abilities and defining powerful digital strategies.

Cyber Crime

Most banking and financial applications are liable to digital assaults the most. The explanation is self-evident, what with money being the undeniable goal. Fraudsters have been known to be imaginative in their endeavours to siphon reserves, either as enormous sums in a discharge, or tiny sums from a great many accounts, over a significant stretch of time. If not money straightforwardly, there is consistently the risk of information being compromised.

Spearheading with Innovation

Superheading the marketplace by offering imaginative services isn’t simply wanted, yet in addition required remaining on top of things and attracting a wide customer base. Particularly with an enormous base of youthful users, it becomes imperative to recognize your company in the consistently becoming and competitive marketplace. In any case, companies are frequently reluctant to take the jump, as they know that things can terribly reverse discharge and cause moment reaction from perturbed customers.
Sustainability

Post fruitful development and implementation, the following squeezing challenge to handle successfully is sustenance. An association’s supportability as a pioneer is conceivable just through collaboration. Just when the users recognize the estimation of the product or service will the hierarchical worth skyrocket to progress and stay there. In this specific circumstance, the intensity of internet based life is frequently ignored. While consistently great reviews elevate the association to a superior status, consistently awful reviews can decimate even an entire realm.

Delivering Quality at Speed

In the surge of needing to convey products and services at an accelerated speed, companies regularly tend to compromise on the quality. The issue with quality is that there is nothing of the sort as a little bug; a bug is a bug. There have been a few cases of associations purposely choosing to disregard deserts in products and programming even before the thing hit the market.

Suggestions to Overcome the Problems and Challenges of Digitalization of Indian Banking Sector

• Quality Assurance professionals are trained to investigate, survey, and guarantee the nature of the product. They become engaged with the process at an opportune time in the product lifecycle and guarantee that applications are conveyed with premium quality. On account of a performance issue in spite of the thorough testing, they will have the option to tend quickly to the problem and fix the bugs in a split second.

• Software testing assumes a key job in guaranteeing device compatibility with the product, and makes the entity more user-accommodating. This constantly prompts additionally breathing space for investigating the devices that will have the option to convey the company’s customized programming better. This commonly spares the company a large number of dollars and associations can, subsequently, spend their endeavours on making sense of an able digital strategy.

• Security testing will track down the potential purposes of vulnerabilities that programmers may exploit, and offer the appropriate arrangement. Security testing demands an intensive comprehension of the banking system and offers a top to bottom information on the inner design. Quality Assurance professionals that have ability over the banking area are the ones that would best handle digital wrongdoing.

• Software testing can guarantee that all the significant bugs are handled as they rise, and intensive investigation is led so as to have preventive measures. This will give creative companies in their particular ventures a lift, with the goal that they can keep on investigating how to more readily amuse their customer-base.

• Understanding and utilizing the intensity of web based life, while vital, can be ridden with issues. Trolls, malwares, and tweets about performance issues would all be able to unleash devastation if not adequately and quickly managed. Programming testing work force can spot genuine problems and promptly fix the issues, in this way containing the issue. This enormously supports brand picture over the long haul.

• Robust programming testing guarantees that the product or programming hits the market well in time. By intently dissecting conceivable programming issues directly from the requirements gathering stage, quality affirmation specialists guarantee time to market.

Discussion And Conclusion

Banking and financial services have consistently been very formal in nature, and in light of current circumstances. In any case, things are, quickly transforming in the digital period. It is as significant that the banks stay as transparent, as their customers remain authentic. The primary target behind coordinating banking services with innovation is, without a doubt, accommodation. Innovation has now become commonplace to most people, to an extent that it impacts their way of life. It, at that point, becomes fundamental for businesses to separate themselves in the digital space with one of kind contributions. The new experts have made the capacity to utilize the networks and data that they
make around their customers, products and services to produce an exceptionally customized customer experience. Digital experience is unquestionably increasingly customized.

Another influx of innovation is revolutionizing the manner in which customers connect with their finances. From social to portable capacities, banks are reconsidering their method for doing business to offer a superior customer encounter and stay competitive. By taking a gander at the situation existing now in India, one can find that People are currently taking increasingly more bit of leeway of the digitalization if there should be an occurrence of banking. Traditionally, banking practice use to focus on “prod expanding deals targets) as opposed to seeing how best to charm its customers. In recent times, banks are quick to become more customer With the assistance of digitalization Indian banks are presently getting more customers as well as conveying first class services, as proficiency considers well. In this inventive business model, it is critical to guarantee administrative compliance for smooth and long haul execution. The key challenge in the digital age is to guarantee that all customers are protected against cybercrime, and that the most exceptional cybernetic values are utilized. The change to digitalization and its congruity ought to serve to reduce costs for the business, since this will reduce work and robotize the system.

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