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## EMERGING TECHNOLOGY TRENDS IN BANKING & FINANCIAL SERVICES INDUSTRY IN 2020

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**Abstract:** The banking and financial sector plays a crucial role in the development of economy. The development of banking and financial sector depends upon the services provided to the customers in various aspects. The banking sector and financial sector has seen a number of changes. Most of the banks start innovative banking services with object to create more value customers. Chatbots, Artificial Intelligence (AI), Big Data, Blockchain Integration, Cyber Security, Robotic Process Automation (RPA) and Cloud Computing system are some new innovations. These new innovations may be grabbed by the Indian banks. So, this paper enlightens the knowledge light on new innovations in banking sector.

**Keyword:** Banking and financial sector, Emerging Technology, Chatbots, Artificial Intelligence, Big Data, Blockchain Integration, Cyber Security, Robotic Process Automation and Cloud Computing.

### I. INTRODUCTION:

The banking doesn't merely lies in the acceptance of deposits & granting of loans to the needy persons. This was a conventional function of banking. Nowadays it's not limited to only deposit and lending but enhanced to more sophisticated services. Current banking industry and financial Services constitutes new innovative services with new technological system. Information technology in banking sector means the utilization of revolutionary information and communication technologies along with with computers to enable banks to deliver better services to its customer in an exceedingly most secure, credible and affordable manner.

Banking systems and financial institutions are integral parts of an economy. Seamless functioning of those sectors is most important for an economy to grow. Due to the advent of digital technology, banking and financial services have undergone an enormous shift in their mode of operations. New trends are gaining momentum at a fast pace because customers find it convenient and also flexible at the same time. The emergence of financial technologies has resulted in the introduction of several technological advancements in the industry. Fintech companies, internet banking and mobile banking are just few examples that mark this shift.

Today, we live in the digital era where technology is driving change in almost every industry, whether it is the use of smartphones, automation to boost operations, cloud computing to collaborate, data analysis to extract insights. Smart use of technology is becoming an integral part of the success in business. However, no industry is as driven by technology as banking is. A study by PwC says more than 81% of banking CEOs are considering the impact of digitization in the finance world. There are several financial organizations trying to keep up with the newest technology trends like chatbots, Artificial Intelligence, Blockchain, etc.

With such a lot of competitors vying for your customers, the only winning point is to keep track of the recent trends and start to implement them in the better way before your competitors bring about the change in the field. Get immense benefits and improve business results by keeping in mind the newest or latest technologies.

### II. REVIEW OF LITERATURE:

- **M.Sujatha<sup>1</sup>, N.V Haritha<sup>2</sup>, P. Sai Sreeja (2017)** explained that, an up gradation of technology banks are playing vital role in economic development. Banking sector in India is resulting with increased growth in customers. The changes made by banks are mostly focused on financial inclusion for expansion into rural areas and bringing stability by boosting credit growth making banking services near to the customer directly and reducing customer valuable time.
- **T.Uma Maheshwari Rao and L Hymavathi (2005)** stated the importance of internet usage for banking worldwide and its relevance in Indian scenario to compete the present banking business the banks were transforming themselves and conducting their business electronically. This transformation leads to normal banking to electronic banking, enabled customers to transact online, while saving on various factors. Normal Banking activities still prevails in developing countries like India.
- **Kohli (2001)** emphasized on the importance of technology. According to him, technology is emerging as a key-driver of business in the financial services industry. The advancement in computing and telecommunications has revolutionized the financial industry and banking on the net is fast catching on. As e-commerce gets transformed into e-commerce with the increasing use of technologies like WAP, banking business is in for a major overhaul.
- **Narasimham Committee (1991):** The banking industry has introduced various new customer services and products using IT. The banking industry has gone through many changes as a result of the introduction of IT. In fact, the structure of the industry is continuously changing because of rapid development of IT.

### III. OBJECTIVE:

1. To know the recent technology trends in banking and financial services in 2020.
2. To study the emerging trends in banking technology.

#### IV. RESEARCH METHODOLOGY

This is a descriptive research paper based on secondary data. Data have been found on various websites, Reports of RBI, KPMG, IAMAI and various others. The data was also collected from journals and articles published in newspaper.

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The present research study uses the most recent available published secondary data. To achieve the above stated objectives, the secondary data is used. The secondary data that mainly consists of published annual reports of various banks. The secondary data was also used from various reference books related to E-Banking, Banking Service Quality, E-Commerce, M-Commerce, Information Technology, Marketing, Banking, Finance, Commerce, Management etc.

#### V. RECENT TECHNOLOGICAL TRENDS:

##### 1. Chatbots:

A chatbot could also be a chunk of conversational software that uses AI to mimic human interactions through a conversation interface. This technology allows users to induce the info they need using natural conversational language, instead of complicated menus and graphical user interfaces (GUIs). Users simply blood group question as if they were contacting a friend, and thus the chatbots replies with a relevant response.

Customers today don't have the patience to attend for long hours and obtain their queries resolved. Instead, they demand quick response and effective resolution of their issues. Chatbots has made this possible in banking organizations. Supported by AI technology, chatbots are utilized by many finance companies to scale back costs and meet ever-changing expectations. Now, users not rely upon traditional methods of two-way communication like email, phone, etc. Report by Gartner states that over 85% of customer service interactions are handled by chatbots in 2020.

##### 2. Artificial Intelligence (AI)

Artificial intelligence is the simulation of human intelligence processes by machines, especially computer systems. These processes include learning, reasoning and self-correction. Some applications of AI include expert systems, speech recognition and machine vision. Artificial Intelligence is advancing dramatically. It's already transforming our world socially, economically and politically.

Banks have benefited enormously by adopting newer technologies like AI leading to lower costs and more profit through multiple channels. One common example is using AI to facilitate mobile banking enabling customers to induce 24/7 access for any banking operations. AI also helps financial institutions to create more practical lending decisions and better risk management.

##### 3. Big Data

With the increasing amount of knowledge generated daily by the banking sector, it's becoming difficult to extract actionable insights which will help in growing more opportunities. Big Data is that the answer! This technology has undoubtedly put all the banking data i.e. debit/credit card transactions, ATM withdrawals, money transfer, etc. to form informed decisions and process it effectively to gain valuable information that is needed to remain competitive in the future.

Big Data helps in making banks learn about their customers in a better way enabling them to make real-time business decisions through analysis of customer's purchase habits, sales management, etc. Other added benefits of big data are better marketing, product cross-selling, fraud detection, customer feedback analysis and many more. Additionally, it aids in identifying the latest market trends and streamlining internal processes to reduce risks.

##### 4. Blockchain Integration

Blockchain is also known as for cryptocurrency like Bitcoin that helps in keep track of transactions in a secure and verifiable way. Talking about security in banking institutions, Blockchain will surely disrupt banks by improving security, saving money and improving customer experience. As blockchains are highly secure and simple to operate, it will be used for promoting transparency during payments & currency exchange in banking.

Banking and technology are very closely associated and innovations have changed banking drastically last period of time. The digital innovations in the banking sector started with the introduction of money that replaced the barter system & then the gradual replacement of wax seal with digital signatures. One such disruptive innovation which is changing the banking sector globally is Blockchain Technology.

##### 5. Cyber Security

Banking is one such industry that deals with sensitive & personal information, which has made it a sexy target for cybercriminals. Though it's impossible to prevent all the cyber-attacks due to the diverse interactions with customers' money, security is essential and bank institutions must be ready with the plans to attenuate the damage if any mishap occurs.

Banks must share best practices and knowledge to assist customers avoid the probabilities of cyber-attacks. Additionally, they should invest in technical measures like working with the government to prioritize cyber security; educating customers about their cyber security responsibilities, roles in keep their data safe.

#### 6. Robotic Process Automation (RPA)

Using RPA, the bank can use customer service bots to deal with low-priority questions from customers like account balance check, payment queries, etc. and save the time of human agents to handle with high-priority concerns. This will not only improve productivity but reduce labor/operational costs and therefore the error rate. With instant resolution through RPA, users can make a fast decision for his/ her credit card application without getting any human agents involved in the process.

Though robotic innovations are still in the adolescent phase, banking organizations should be remember of all the advantages it offers to take care of long-term AI results. Leverage RPA technology to deliver the best possible customer experience in the banking world through robots and virtual assistants. Automate your repetitive tasks without human intervention and save costs efficiently.

#### 7. Cloud Computing:

Another latest trend of the industry is cloud computing which can make 24/7 customer service possible providing any time service to customers. This enhances the performance of financial institutions and scale-up services more quickly. Customers will only purchase the services they have enabling banks to manage costs.

One can easily avail pay-as-you-go pricing by paying the cloud provider as per the usage, making it easy for individual customers or businesses to use the cloud. In the banking system, cloud computing can promote safe online payments, digital money transfers, wallets, etc.

### VI. CONCLUSION

The Banking sector is now witnessing a new wave of progress with the introduction of new technologies; the face of the banking industry has changed tremendously over the years. Indian banking system will further grow in size and complexity while acting as an important agent of economic growth and intermingling different segments of the financial sector. It is very much sure that future of banking will offer more classy services to the customers with the constant product and process innovations. While banks deal with rising demands, increasing flexibility needs, new demographics, etc., technologies come into action to deliver efficient customer experiences. Chatbots is one of the most emerging trends that will impact the banking industry by saving costs and improving productivity. Get in touch with experts of AI chatbot solution providers to drive a radical shift in the banking world with these top trends in 2020.

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- [5] Alex Hales (2019) Article- "Emerging Technology Trends for Banking Industry in 2020 & Beyond" innovative solutions in the banking sector and analyze them in the context of assumptions of the paradigm of relationships and features of product orientation with related to technology. Banking is a rapidly changing industry. The biggest paradigm shift that has occurred is the digitalization of banks which aim at providing customers with a broad scope of benefits. Technology-based innovations will be the key determinant in offering diversified and customized banking services to their varied customer portfolios, at a reduced cost. Even if it is convergent with the assumptions of the paradigm of relationships, it should be indicated that some banking products are based on advanced solutions that may surpass real market demands