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Recommendations Report (Limited) on AI and Fintech Governance in India: Item-Wise Specific Discussion

Introduction

- It is imperative to understand that in the last few years, the banking and the financial sector in India has tremendously gained momentum and technology has played a major role when it comes to the development of the financial and the banking sector in India. The financial sector can be deemed to be regarded as a sector which very strategically focuses on technological advancements and the ability of technology to respond to the various expectations that its consumers have.

- The traditional methods of banking and carrying out banking services are reaching its level of stagnation and the introduction of AI and blockchain technologies would surely enable individuals to carry out their banking activities with just the click of a button. It is imperative to focus on the term, "Fintech" as Fintech takes under its ambit all the new advancements in technology, applications, processes or business activities undertaken through the various channels of delivery in the financial sector.

- Fintech aims to foster the partnerships that exist between traditional financial institutions, banks, hedge funds and other financial institutions. It aims to aid consumers to have better access to financial services. It is imperative to understand that in the last few years, the financial and the banking sector has grown tremendously in India and an innumerable number of Banks and Financial Institutions have already implemented the front-end and the back end processes thereby offering technological solutions for businesses in carrying out their various business activities.

- At this conjecture, the AI landscape in India in the financial sector can still be deemed to be regarded in its nascent stages and the natural language processing and natural language generation technologies which are constantly developing in the form of chatbot initiatives by various banking and financial actors is significantly gaining a lot of momentum.

Agenda Item 1: AI in the Banking and the Financial Sector

- The digital Banking and finance sector in India, with special emphasis on retail banking has certainly benefited tremendously ever since the decision was made by the Government in the year 2016, with

regards to the discontinuation of the usage of Rs. 500/- and Rs. 1000/- notes.[1] Ever since this decision was made, India has seen an exponential growth when it comes to the use of digital payments and the various instruments being used for carrying out digital payments, however, there are certain barriers such as the network infrastructure in India is still in its nascent stages and is developing.

- The Point of Sales (POS) machines and a fast transforming landscape of apps and digital payments is leading to a steep learning curve when it comes to dealing with buyers and sellers across the country (especially the small-and medium scale) and this can be deemed to be regarded as an aftermath of demonetisation.[2] However, the development of AI when it comes to retail banking and carrying out financial and investment services in India, is to be understood in terms of the proliferation of data and how digital payments could be deemed to be regarded as the way forth.

- It is extremely crucial to understand that the use of AI in banking would enable India to understand rich digital trails of financial transactional data and this data could be used in order to carry out the various activities that banks undertake. This would enable banks to examine, understand, predict, create and respond to traditional consumer behaviour and the various behavioural patterns that its consumers adhere to. It would enable banks to respond with ease to the various consumer behavioural patterns when it comes to the rising demand for online and conversational offerings with regards to undertaking banking activities.

- The unparalleled growth of the financial sector in India can be deemed to be regarded as a result of the development in the field of mobile technology in India, which has reached its zenith in the last few years. Banks are constantly making use of these technological advancements and now each bank provides online internet banking services to its customers and also provides an application support to their customers via a dedicated application designed by the bank which specifically brings the bank into the hands of its customers and it can be easily accessible with just the click of a button. This has resulted in the growth of services such as internet banking, mobile banking and payment applications.

- This paradigm shift has surely led to an increase in the banks partnering with various other organizations which specifically focus on the development of AI and how AI and Machine Learning could be used by the banks in order to make the banking process much simpler and easier for its users.

- The Indian Banking Sector adopting Artificial Intelligence can be deemed to be the next big thing, however it can safely be said that the usage of AI in the Banking Sector is still in its nascent stages, however, it is quite necessary to understand that the use of AI would also bring about innumerable data and security threats which need to also be addressed and all these aspects are underway, however what is extremely pertinent to note at this conjecture is that the use of AI in the banking and the financial sector and its usage in the back-end operations is different and changes according to the different stages of operations. However, AI tools have developed enormously in order to facilitate the banking experience and to make business and management operations easier and simpler.

- Various prominent organizations in the financial sector are carrying out test runs with virtual customer assistance software as a means to processing their queries and tackling their various issues by connecting themselves with their customers. The last few years have seen a huge growth when it comes

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[1] Rai, S. (2016, November 24). India's Cash Ban is the best thing to happen to digital payments, https://www.bloomberg.com/news/articles/2016-11-23/cash-ban-the-best-thing-to-happen-to-indian-digital-apyments.
[2] Singh, S. (2017, October 03). Is the 25 billion digital transaction target for 2017-18 too steep to achieve?, https://economictimes.indiatimes.com/news/economy/policy/is-25-billion-digital-transaction-target-for-2017-18-too-steep-to-achieve/articleshow60915736.cms;.

to financial services companies and fintech companies marking their niche when it comes to conducting the proof of concepts (POCs) and they have successfully been able to implement some of these emergent technologies into their operations.

- However, it is imperative to note that while AI technologies are still to gain momentum, in the banking sector, however they have a competitive advantage over technologies that has been recognized by the banks taking into consideration that impact that it has on innovation centres and especially when it comes to running hackathons – these initiatives often take the shape of a partnership between companies that indulge in the fintech sector and between other financial institutions.

- The use of AI in the banking and the finance sector can be deemed to be regarded as a huge step within the digital sector. The use of AI and Machine Learning in the field of Banking could enable banks to undertake various operations and also enable it to successfully carry out back-end operations with ease across the various stages of operations.

- It could use AI tools in order to develop its Business and Management Operations. For instance, the Developmental Bank of Singapore has various actors across the sector experimenting virtual customer assistance as a means of offering an alternative form of customer service assistance, processing queries to answer these questions posed by its customers, connecting users to the appropriate services that they require and these all activities could be undertaken via text and speech.[3]

- AI algorithms could be used in order to carry out personalized engagement between various customers and the organizations, with the help of a cognitive engagement solution which would enable the firm to specifically cater to the needs of its customers, and then it would make it easier for financial institutions to understand the multitude of profiles of its customers. Such technology must adhere to content, behaviour and other data sources and adheres to models off of which actionable insights will be offered with regards to people and content, matches products and services pertaining to the various customers, their behavioural patterns and facilitates the delivery of personalized advice being given to consumers based on their digital profiles and the history of the transactions that they have made.

- AI could further be used in conducting financial operations such as operations pertaining to Credit Scoring and taking Loan Decisions. AI and Machine Learning tools can be used by financial lending companies in order to calculate credit scores of their clientele making the loan lending procedure hassle free. With the use of AI algorithms that draw various data entries such as an individual's banking transactions, their past decisions, their spending and earning habits, their family history, their CIBIL scores, et cetera. However, Loan frame uses AI and Machine Learning in order to examine a borrower's profile and evaluate their credit worthiness.[4]

- AI as software can be used in order to constantly monitor and prevent the instances pertaining to fraud, money laundering, malpractice and the detection of potential risks, for example firms draw on an individual's spending patterns, examining their behaviours in order to determine these patterns, providing them a headway to identifying any possible or potential irregularities that exist within the system.

- Mobile Banking is something that is the new normal; these apps can track user's behaviour and give them customized tips and insights on savings and expenses. Along with making the interface of

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[3] Digibank by DBS, 2018, April 12., https://www.dbs.com/digibank/in/about.html.

[4] Available at https://www.loanframe.com./

payments highly convenient. The point that needs to be highlighted is that such banking must not become invasive of the privacy of people.

- Tokenization is an evolving concept that refers to representation of any asset or rights to an asset into a digital representation (a token). This can be used as a representation of shares/entities and will be known as security tokens. Efficiency and convenience is improved by this process as it uses the Blockchain technology to maintain a transparent system. The challenge that remains is the lack of infrastructure in the banks at times to support such a system and the lack of any legal policy makes this entire process even more dubious for the public.

- About 32% of financial service providers are already using AI technologies like predictive analytics, voice recognition among others, according to joint research conducted by the National Business Research Institute and Narrative Science. For instance, banks like SBI, Bank of Baroda, HDFC, ICICI, YES Bank and others are already deploying artificial intelligence to streamline the regular processes.

Benefits of AI in Fintech Industry: Banking Sector

1. Chatbots and robotic advisors to orchestrate personalised and contextual conversations
2. Customer on boarding to reduce turnaround time for decision making based on credit and social profiles
3. In facilitating automation of workflows for internal operations such as document processing and duplication of effort across departments
4. In optimising the supply chain
5. In preventing asset pilferage
6. To control costs for critical features at every stage
7. For faster innovations and quality solutions to improve productivity
8. To save man-hours wasted on repeatable mundane task
9. Structured Rules and Regulations to keep check on Fintech Industry.