Banking Buzzwords:A Technological Innovation in Investment Banking

[1]Vedapradha. R,   [2]Dr. Arockia Rajasekar
[1]Doctoral Research Scholar, DepartmentofCommerce, St.Joseph's College (Autonomous), Trichy. India.
[2]Assistant Professor, Department of Commerce, St.Joseph's College (Autonomous), Trichy. India.
Email - [1]vedahariharan@gmail.com, [2]arockiarajasekar@yahoo.com

Abstract:*Technological Innovation can be the only panacea for a business firm to sustain in the industry that facilitates in curbing the competition. The paradigm shift in banking and financial serves has strategically focuses on transformational changes in 2018. Banks are adopting computer programs to enhance capabilities of business by the implementation of sophisticated artificial intelligence to curb fraudulent practices, improve customer response, offer standard customer service, enable virtual assistant to offer real time solutions, digital documentation etc. Transformative technology has enabled banks and financial institutions to automate their operations based on advanced data-driven. Artificial Intelligence, Business intelligence and digitalization, will focus on cognitive application in functional areas of business along with investment and compliance sectors of financial services industry.*

Key Words: *Artificial Intelligence, Scalability, Technology Enabled Service (TES) and Datafication.*

1. INTRODUCTION:

Banks are adopting computer programs to enhance capabilities of business by the implementation of sophisticated artificial intelligence to curb fraudulent practices, improve customer response, offer standard customer service, enable virtual assistant to offer real time solutions, digital documentation etc. [1]. They are transforming their service towards the customers by embracing technological innovations.

Some of the technological terminologies that are currently applied in today's Investment banks are:
  a) **Business Intelligence:** Analysis of business related data either quantitative or qualitative by strategic or technological to gain prominent insights and take better decisions. Ex: TRUPOINT software
  b) **FinTech:** The sector of financial and technology industry primarily focused on offering financial services through technology. It stands for Financial Technology. Ex: Crypto currency
  c) **RegTech:** It is a combination word of Regulatory and Technology. It refers to any technology that facilitates the financial companies to comply with financial regulations by using a software. Ex: Redlining Analytics
  d) **Crypto currency:** Digital currency which are secured and decentralized that is controlled by every single data point and digital ledgers are verified by every member in the network. Ex: Block chain
  e) **Neo Bank:** A new wave in the banking industry where financial institution challenges the traditional banking market in which digital financial institutions provide bank –licensed products through relationships with partnered banking institutions. Ex: Yolt by ING
  f) **Artificial Intelligence (AI):** It refers to the ability of a machine to make decisions with the help of computer programs with an objective to achieve goals efficiently and effectively. Ex: IBM's Watson
  g) **SaaS:** It stands for Software as a service, which provides a centrally hosted software or application via internet as a service. Ex: Microsoft Office 365
  h) **TES:** It stands for Technology Enabled Service. It is a type of product or company that leverages technology with service to offer value to the customers.
  i) **Data Stewardship:** It projects the responsibility of a company, product or person towards the data quality and security in the business. Ex: TRUPOINT
  j) **Location Based Authorization:** It is a type of security feature primarily focused on the software and application which controls access of the systems based on the location.
  k) **Datafication:** It represents the application of data in the area of business for making decisions, build strategies which describes the movement towards quantification. Ex: Fit bit
  l) **Predictive Analysis:** It describes the analysis focused on using present and past data to forecast the future that identifies the opportunities and risk especially regarding credit risk, fraud detection in banks [2].

2. LITERATURE REVIEW:

Investment banks deal with managing huge quantum of funds whose clients are basically financial institutions, central banks of various nations' etc. Mobile banking can be more effective only when it is perceived usefulness, credibility, and costs have been considered by the banks for successful implementation. Mass channels are more influential in reaching out to the audiences than social media [3]. Investments on the technology are very huge in quantum and its effects must be clearly considered before implementations the merits of such applications are intangible in nature and productivity can be valued in connection with economic value of the information technology [4].Banks play a significant role in the economic development of any nation that influences in implementation of regulatory policies to monitor economic activities and economic growth which can be possible only with the sophisticated technology enabled solutions [5].

3. RESEARCH METHODOLOGY

The study is descriptive with an objective of exploring the various innovations in the field of Investment banking confined to various Investment banks operating across the globe. The researcher has attempted to emphasize on the implication of artificial intelligence in the mentioned field of study. There is scope for venturing into more new concepts of innovations that are applied in the area of banking.

4. ARTIFICIAL INTELLIGENCE (AI)

Artificial Intelligence will focus on cognitive application in functional areas of business along with investment and compliance sectors of financial services industry. This seems to be a crucial leap in advancement from advanced robotics towards machine learning and predictive analysis. Most of the banks in the industry are focusing on developing the AI to gain the competitive edge that enables them to achieve betterment in speed, accuracy, cost effective-efficiency, and customer satisfaction. Ex: Chatbots.

5. IMPACT OF AI IN INVESTMENT BANKING

Artificial Intelligence is a branch of computer science that focus on creating intelligent machines. Some of the activities performed by these includes problem solving, planning, reasoning, learning, etc. It is helping the banking industry to serve the customers better and offer more relevant products through right channel.

Chatbots are currently applied by the industry which are automated service assistants offering customers, the convenience of resolving their queries via online messaging system through devices like Personal computer, laptops, and smartphones eroding the personal visit to their branches. Ex: Nina, Swedbank's AI chatbot.

AI algorithms can be developed to produce highly refined investment strategies that ensures high velocity data to outsmart the competition and enhancing value to the customers. Management of customer data appears to be prominent area where the application of AI is constantly progressing. Ex: COIN (Chase's Contract Intelligence) from JP Morgan. Money laundering can be curbed with the application of AI in banking industry.

6. COMBATING MONEY LAUNDERING:

Money laundering has been a major challenge for the financial services and banking industry faced at the global level. AI has proved to be crucial silver lining to overcome this issue. The technology allows the bank to prevent potential money laundering activity by analyzing internal, publicly available and transactional data within customer's wider network. Some of the techniques applied as combating measures includes machine learning, deep learning, data mining and analytics etc.

The ability of implementing AI in banking can get away from the below pain points.
a) **Risk Assessment:** Large volumes of complex data are involved in due diligence, risk assessment, monitoring that facilitates effective lending practices.
b) **Financial Landscape:** AI enables the firms to learn and adapt to changing environment, inputs various changes in the area of finance and banking system.
c) **Value addition:** Automotive repetitive tasks handled by humans are replaced which has reduced the cost and increased the accuracy levels and speed adding great value to the customers.
d) **Consistency:** The AI emphasis the banks to be more specific and consistent in their operations leading to cost effective and address to customer queries efficiently.
e) **Decision Making:** Errors can be completely evaded or reduced by improving the quality of decisions made at different levels of management that also ensures better forecasting.
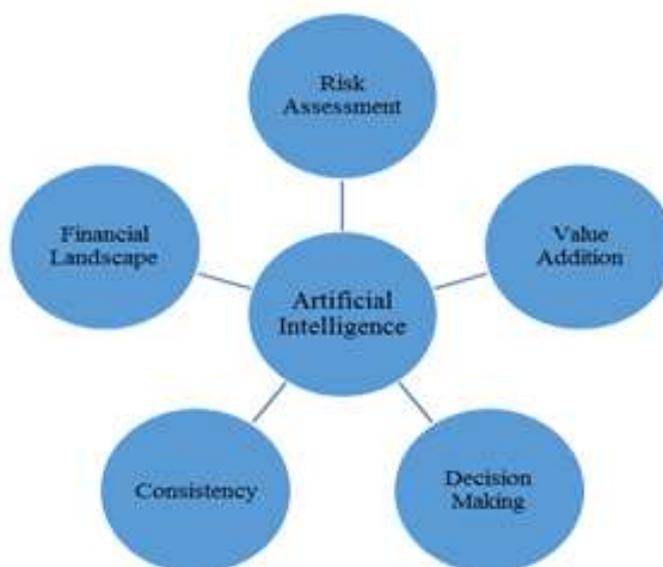
Fig 1: Capabilities of AI in Investment Banks
(Source: Author's own compilation)

7. INFLUENCING TRENDS

The Investment banking has been no exclusion when it comes to the application of influencing trends through technology in banking. Some of the leading trends are:

a) **Profitability**: Investment banks primarily targeting on improving their revenues post financial crunch in 2008 concentrating on reducing cost, improving delivery functions in near shore & offshore localities, adopting strategy to gain edge through deliver sub-optimal returns.

b) **Regulation:** Stringent regulatory framework have influenced these banks by creating impact on capital formation reducing market liquidity, disincentives to hedge portfolios etc. Many banks are expected to transform and re-engineer their business operations to cater to new regulations.
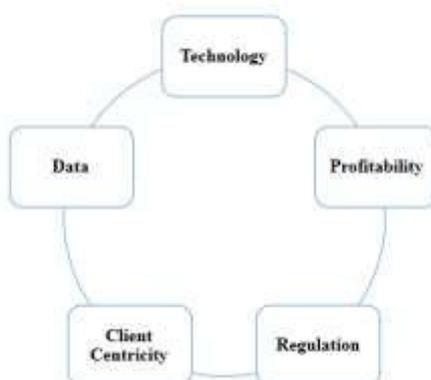
Fig 2: Component of Influencing Trends in Investment Banking
(Source: Author's own compilation)

c) **Client centricity:** Client relationship management has more technology driven to ensure effectiveness, rationalization, measurement of their strategic performances, creating an e-platforms from front office through back office operations fully integrated designed to offer cross products, etc. are the need of the hour that has led to transform the business operations.

d) **Data:** Adopting big data analytics, data governance, data knowledge management, have been embraced that facilitate in generating more revenue, enhance core banking solutions, based on the technological innovation empower these banks to operate at a much robust pace and to create better client approach.

e) **Technology:** Investment is such a pivotal area that calls for enormous level of change management by adapting and thriving to sustain in the industry through streamlined architecture that improves process efficiency, work within regulatory framework, and to create competitive edge by embracing technology like cloud services, FinTech, RegTech, Artificial Intelligence etc. [6]

8. CONCLUSION:

Banks are automating their processes, migrating their infrastructure and applications to the cloud to create a seamless customer journey. They must remain cognizant of numerous implication from within and outside the financial service industry. Technological Innovation can be the only panacea for a business firm to sustain in the industry that facilitates in curbing the competition that influences business in their efficiency, productivity, costs, relationship with clients, retention of market share, customer satisfaction and growth having greater impact on the economy in various sectors of business.

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