How Artificial Intelligence is Strategically Evolving the Customers Relationships: In Context to Indian Banking Sector

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ABSTRACT

The growing transformative world in terms of technology, customers relationships, business management and innovation, it has become imperative for each sector of the Indian society to prove its mastery or dominance on the global scale. In pursuance of this fact, the banking sector of the Indian society has been changing its working style. As the growing time has made the technological upgradation an indispensable attribute for many rising businesses, the Indian banking sector has not been left behind from this aspect. The technological evolution by the man-made intelligence has given rise to a prominent innovation of this generation named as Artificial Intelligence. Since the time of the launch of artificial Intelligence, it has become a significant feature of every sector of the Indian economy. But the major contribution, the AI has made is in the banking sector of India. The adaptation of AI technology by the banking sector has rebuilt its organisational management skills. It has become more connected with the people and improved its service delivery. It has also reduced the employee burden and used robotics instead of humans to satisfy the customer needs at the time scarcity of employees. This research paper has been written to underscore the importance of artificial intelligence utilisation and adaptation in the banking sector and the comfort it has provided to its service delivery along with building the customer relationships. The overall data has been collected from the secondary sources. The research will be mostly explanatory, the graphs and relevant images will be collected from the authentic sources and represented along with the detailed analysis. The generated results will emphasize the relevance of AI in context to banking sector.

Keywords: *Artificial Intelligence, Banking Sector, Customer Relations, Employee burden, Service Delivery.*

1. INTRODUCTION

Artificial Intelligence is practically a transformative force for the banking sector which has given rise to many new features and proved to be a potent catalyst of this sector. Earlier, banking sector was adapting traditional methods for its service delivery but with the launch of AI and its introduction into the Indian banking sector, it has made some technological upgradation and changed the style of public dealing. The artificial Intelligence has catapulted the Indian banking sector to new heights on the global level with its remarkable achievements of building customer relationships, overseas market building, reducing red tape, handling complex tasks, reducing employee burden and also acquiring success. This research paper has emphasised on the latest features of Indian banks, their customer relations, reduction of employee burden and success on the global level due to AI.

Pic Courtesy: Fintech.com

Tools of Artificial Intelligence used in the Indian Banking Sector:

"Artificial Intelligence, commonly referred to as AI, stands as a potent catalyst driving transformative changes across various industries. One sector experiencing a profound AI-driven revolution is the field of banking." (2020, Star Knowledge). Artificial Intelligence has given a new meaning to the Indian banking sector. Some of the significant features of AI that banking sector has adapted in the recent years have been discussed below:

- ✓ *Public Service Delivery:*

Banks have taken public service delivery as their ultimate aim. They have removed their traditional approach of lingering works and started addressing the customer issues and their queries in real- time.

- ✓ *AI generated chat boxes:*

This feature solves the customer queries in a blink of a second. Instead, of long waiting to resolve one query the customers can now easily generate answers by writing their query into a chat box which is displayed on the banking application page. This is also a 24*7 feature which is absolutely accessible without any time constraint. Example **Erica, Ask Laila**, etc.

- ✓ *AI voice generation:*

An AI generated recorded voice generally guides the customers during any complex process of the customers while doing banking and these voices also saves the employees time and also builds a communication with their customers.

- ✓ *Speech to Text:*

This feature helps the customers to save their valuable time by just saying their problem instead of using efforts to write and elaborate it in detail.

- ✓ *Personalised Financial Advice:*

Customers can easily state their financial requirements on an **AI generative chat box** and based on their financial behaviour and requirements the banking advisors can suggest them relevant knowledge.

- ✓ *Detection of the fraudulent transactions and cyber fraud:*

AI generated tools like **Gen AI Algorithms** are used to detect any fraudulent transactions or cyber fraud which can save the banks from getting hacked or robbed digitally.

- ✓ *Automated generated KYC process:*

To save the time of the employees', banks have started using AI technology to do the KYC process of their customers. This feature also assures the risk assessment properly and without much hassle.

- ✓ *AI Blur:*

This feature helps to protect the sensitive information from getting leaked and also saves it from getting used for unethical purposes.

- ✓ *Other AI tools for banking:*

Predictive analysis tools, Sentiments Analysis tools, Facial Recognition, Etc.

Employee & Customer Benefits from using AI:

- ✓ **Know the customers:**

AI helps to give a predictive knowledge about the customers behaviour and demands and this actually helps to cater to their needs and attract them.

- ✓ **Time Saving:**

Tools like chat boxes, virtual assistants or the speech to text are time -saving and resolve any issue or any query in real time without keeping the customers waiting for the employee attention for a longer period of time.

- ✓ **Personalised Financial Advisors**:

Customers can discuss their financial choices with the virtual assistants or the chat boxes and the financial advisors would analyse their behaviour and suggest them according to their choices.

- ✓ **Detection of the fraudulent transactions:**

Customers get saved from the transaction default or the hackings and failed transactions.

- ✓ **Some other benefits that customers acquire are: Easy Self- Service,24*7 assistants, No time constraints, etc.**

- ✓ **Employee Burden reduction:**

Virtual assistants and AI generated Voice communicator resolve the issue of over attentiveness of employees and allows them to take rest.

✓ **Data Entry:**

It saves the employees from keeping a huge track record of the piled-up data and reduces the Red- tape.

✓ **Reduction in the manual errors:**

Humans generally create errors in the calculations and accounts keeping. So, AI generated tools reduce these errors and try to make the data accurate.

✓ **Achieving targets and accomplishing the goals:**

Employees can fix up their targets and use AI tools to achieve their goals in a simpler way without facing hurdles and complexities.

Theoretical Framework:

Raj Singh, (2019), the author focuses upon the application of the AI in the financial services and the changes it made to its dynamics over the period of time. *Theodora L. (2025),* the application of AI in the financial services has improved the efficiency, Productivity and the current scenario of AI in funding and business partnerships. *Rakesh Kumar, (2024),* the author talks about the AI technologies in reducing the work load and also catering to the needs of the customers. *A. Gupta, Dwivedi, Shah, (2023),* author highlights the financial crimes and the solutions AI could provide for them. *Wiley, (2020),* the intelligent and self- learning software are being discussed and the support AI tools are providing to the new age organisations to become effective and smarter over time. Maltare et al. (2023) use Artificial Intelligent such as SARIMA, multi-variable regression, ridge regression, and KNN regression for prediction water level.

Research Scope:

This study will accentuate the Strategic utilisation of artificial intelligence tools by the banking sector for delivering public services, catering to the needs of the customers, reducing the work load of the employees and building customer relations.

2. RESEARCH METHODOLOGY

The research topic will study the tools of the AI which are adapted by the banking sector to build customer relations and reduce the work load of the employees and also cater to the needs of the customers without ant time constraint The data for the topic will be collected through secondary sources such as newspapers, journals, magazines and websites. The research will be mostly explanatory type and the theoretical framework have been provided with the significant books to support the topic and highlight the prominent information in detail with the perception of the authors. The data collection will be based on the authentic sources without hampering its originality. Data Analysis will be done after the presentation of the graphs and an elaborative explanation will be given along with the pictorial representation. The study has not compromised the ethical or moral standards and tried not to breach any code of conduct.

A well- defined pictorial representation of the images and the graphs taken from the relevant sources will be given to support the study. The results drawn from the graphs and the analysis will be discussed and finally, a proper conclusion would summarise the entire study with the details and the results that has been generated.

Data Collection:

A proper data collection has been done from the appropriate secondary sources which would highlight the success rate of banking sector after the application of AI tools.
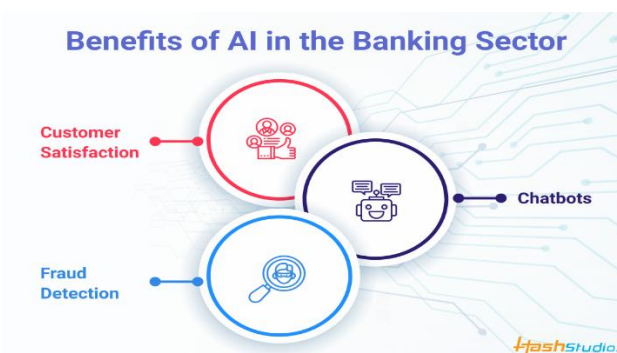
Data Analysis:

Chart 1: Chart taken from Hashstudioz.com
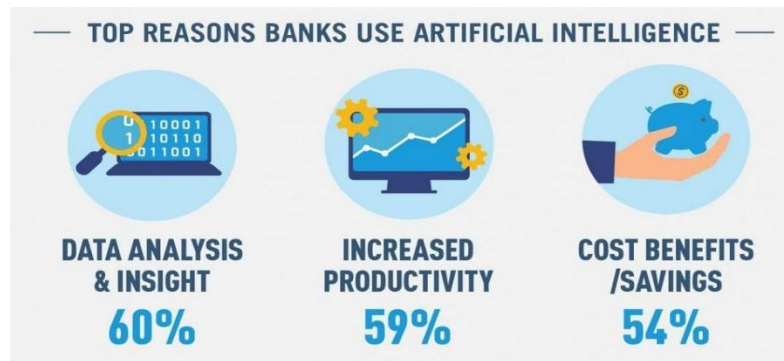
Aditya Kumar Singh, Dr. Sapna Kasliwal

Chart 2: Chart taken from paymentscardsandmobile.com

3. ANALYSIS OF CHART 1 & CHART 2

The **Chart 1** highlights the benefits of applying artificial intelligence into the banking sector. It displays the areas where artificial intelligence has shown impeccable results. Such as providing customer satisfaction by solving their queries in real – time and providing virtual chat- boxes which can help the customers to ask anything they want without waiting for a longer period of time and another important AI tool if fraud detection tool which helps the banks to save from unwanted transactions and keep a check on the customers monetary transaction failures. The **Chart 2** explains the reasons behind using the artificial intelligence by the banking sector. According to the data given in the chart 2, the banking sector uses about 60% of AI technologies for doing data analysis and insight research about the market understanding and customer behaviour which will contribute into their success and to attract the customers, 59% is used for increasing their work productivity by applying the AI tools which can build customer satisfaction and reduces the employee burden which eventually will increase their productivity, 54% uses the AI tools for the cost-benefits and savings by mostly using robotics which would be a one-time investment instead of using traditional methods and investing on constant basis which will gradually increase their expenditure.
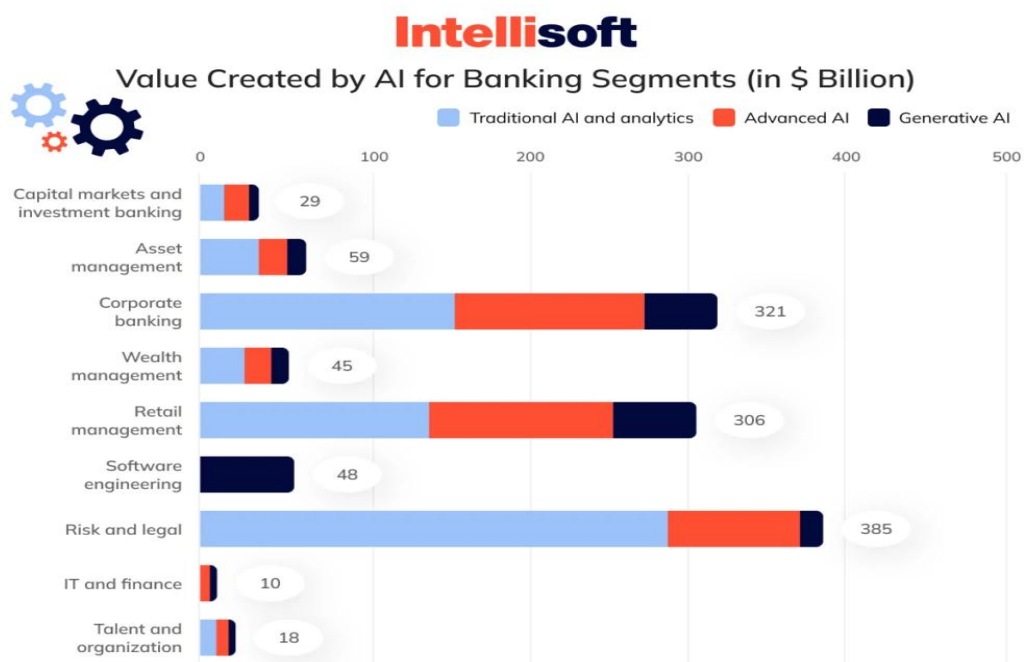
Graph 1: Graph taken from the Intellisoft.com

Analysis of Graph 1

The **graph 1** represents the contribution of artificial intelligence in various segments of the society. ***The given data has been divided amongst 7 areas and each area is highlighting the contribution of AI technology from its traditional style to advanced AI and then moving towards the Generative AI.*** The below mentioned table will clearly state the results to generate a simpler understanding about the given data.

Aditya Kumar Singh, Dr. Sapna Kasliwal

Table 1: Results drawn from the graph 1 and represented on the table (In $ billion dollars)

Topics / Segments	Cap market & inv. Banking	Asset Management	Corp banking	Wealth Management	Retail Management	Software Engineering	Risk & Legal	IT & Finance	Talent & Org.
Traditional AI	15	49.5	199	25	160	-	300	-	12
Advanced AI	20	50	298	38	295	-	375	7	14
Generative AI	29	59	321	45	306	48	385	10	18

Results generated from the Table 1:

As per the **table 1**, the applicability of the *Generative AI* is clearly being used by different sectors. The above-mentioned table has differentiated between 3 types of AI types: Such as Traditional AI types, Advanced AI types and last but not the least Generative AI types. As per the data, the generative AI is leading the chart and its range of utilisation in various sectors shows that it is the most demanded and popular source of AI in todays banking scenario. The generative AI is mostly popular in handling the risk and legal areas with 385 billion dollars, the corporate banking is in the second position with 321 billion dollars where as the retail management is in the 3 positions with 306 billion dollars. These are the 3 sectors which are using the generative AI into their field. The *Advance AI* is maximum required in the risk and legal sector but absolutely ignored in the software engineering and the *Traditional AI* is maximum utilised in the risk and legal sector but totally ignored in the software engineering. ***This data proves that the mostly demanded AI technology is "Generative AI" and the sector which needs it the most is "Risk and Legal".***

4. CONCLUSION

This study is about the application of artificial intelligence in building the customer relations. While conducting this research article, the literature review and the collected data suggests that artificial intelligence has become an indispensable attribute for most of the business sectors. As the time is processing and the importance of accomplishing the goals has become necessary by keeping various factors in mind, such as, customer needs, customer satisfaction, work load reduction and technological advancement, have become imperative to achieve a definite growth. In this context, the banking sector has reached new heights and made a remarkable success over the years; to maintain a constant growth rate it has become significant for the banking sector to adapt AI technology. The banking sector has developed many new features such as, chat box, voice generation, fraud detection, virtual assistant, have helped the banking sector to attract the customers by catering to their needs. AI technology has also been used by the banks to reduce the work load of the employees. Overall, this study has underscored the prominence of AI technology with respect to customer satisfaction, work load reduction, time and cost-effectiveness and achieving success.

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Aditya Kumar Singh, Dr. Sapna Kasliwal

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