1. Reflective Conclusion:

I've learned a lot and met some difficulty studying bank customer churn predictions. It is complex to predict customer behavior and the study of various ways by which it can be done, especially the detailed study of Artificial Neural Networks (ANNs) proved this.

This article involved an extensive literature review, data analysis and logical inquiry, as well as sleepless nights, and the ability to grasp complex ideas. This study has aided my training in machine learning and data science, and provided me some knowledge of practical everyday applications in the banking industry.

From this research I learned the value of data quality and privacy in churn prediction. Also, the search for diverse ways of churn prediction showed the importance of a fitting model based on specific data properties.

This research experience has inspired a greater admiration for the versatility of AI, machine learning and data science. To innovate solutions to complexities, the inclusion of technical skills with domain knowledge is needed. It is my goal to advance in data analysis and modeling, and learn more on the ethical and societal effects of AI programs.

Concerning mistakes, If I had done a more in-depth study I would’ve better reviewed the legal, ethical and social aspects of the AI program. With deeper study I would've given a more nuanced depiction of the effect of AI in banking.

All in all, this research experience has been a significant lesson for me, and I am eager to apply my learnings to other projects in AI, machine learning and data science.

2. Legal, Ethical and Social Aspect:

The use of AI, machine learning and data science in the banking sector causes many legal, ethical and social concerns.

* Legal Aspects:
* Adherence: Adhering to regulatory demands like GDPR should be a must.
* Legal responsibility: Banks should bear the responsibility for the outcomes of AI algorithms.
* Intellectual property: In the wide use and growth of AI models, matters involving intellectual property rights may ensue mainly in cases involving private data.
* Ethical Aspects:
* Discrimination: AI algorithms can unintentionally keep up biases within data. Banks should aim to reduce bias and provide fairness in their algorithms.
* Confidentiality: Banks must ensure protection of customer privacy rights and certify that customer data is being used uprightly.
* Transparency: In the use of AI, banks should aim to be open and honest in decision-making and allow appeals in cases where biases or mistakes are made.
* Social Aspects:
* Effect on jobs: Computerization of various banking operations with AI, has led to displacement of workers from jobs.
* Access and inclusion: AI should be a means of ensuring that financial inclusion and banking services are open for all.

Although, AI, machine learning and data science are vital to the banking sector, the ethical use of these technologies is essential. Being aware of the legal, ethical, and social aspects, banks can take advantage of AI to boost customer service, make innovations while guaranteeing security of customer rights and building their trust in the banking industry.