

CHAPTER 5 – CONCLUSIONS AND RECCOMENDATIONS

This chapter offers conclusions and suggestions for further development after summarizing the research results.

5.1 Conclusions

The research comes to a meeting conclusion in Chapter 5, which addresses the research objective by using a large dataset from PT XYZ to conduct an exploratory data analysis (EDA) in relation to churn and combines it with multilayer perceptron modeling. This combination will lead to a marketing campaign and strategy in retaining customers who have a possibility of churn.

Conducting exploratory data analysis (EDA) for the dataset in relation to churn, the visualization gives complete understanding info customer behaviors and preferences. EDA phase also shown that nine factors have a strong relation with churn, indicating the importance of those factors in performing retention strategy. Tailored marketing and retentions strategies that are designed specifically based on customer age groups and territory can also improve the loyalty of the customers. Adding benefits into some packages such as premium access to some library, educational sites, video on demand providers, can be a program in marketing strategy to boost customers awareness.

Having a big data from PT XYZ, the churn prediction model meets the expectation in performing accuracy of 95% in predicting churn. The model will become a powerful tool for PT XYZ in making a retention strategy for customers who has a probability to churn. This emphasizes the need for PT XYZ's efficient retention efforts by demonstrating the financial feasibility of detecting and keeping clients who are at possibility of leaving.

In summary, this research answers an essential gap in the telecommunications industry, particularly in Indonesia. The work significantly advances both academic research and useful commercial solutions by combining powerful predictive analytics with marketing knowledge.

5.2 Recommendations

As the research is ended, attention is now turned to the future, where strategic recommendations are outlined for both advancing academic research and enhancing PT XYZ's operational strategies. These suggestions are designed to expand on the results, opening the door for further research into the field of consumer behavior analysis and providing a guide for workable business plans.

5.2.1 For future research.

1. False negative result in modeling means there is still room to make the model better.
2. Using a better dataset which is not in imbalance and complete features can give a better view and understanding.
3. Adding some features to count customer lifetime value can give a better perspective specially for financial point of view.

5.2.2 For PT XYZ

1. Create a targeted marketing strategies based on customers group of age and territory.
2. Create a tailored retention plans based on customer segmentation.
3. Improve customer interaction and communication by periodically updating customer contact information.
4. Maximizing PT XYZ application as a media for customer interactions and engagement with contact center.
5. In terms of registration, make sure that the customer fills in the registration form with the correct data. Make a limitation of age for individual customers to prevent an outlier age.

6. Creating a product that has an additional benefit for every group of age. Benefits to access into educational website or journal/publications, bundling product with video on demand provider, or access to gaming site can be crucial in handling certain groups of age.
7. Following the deployment steps in this research.
8. Implement a loyalty program rewarding engagement and purchases, alongside educational workshops for personal growth and community-building events to foster loyalty.
9. Conduct a specific customer satisfaction survey based on the age and customer that subscribed to a package with highest churn rate.
10. Make a promo or loyalty program specially for customers in initial phase in subscription (0 until 2 years). Welcoming experiences, early engagement programs, and attractive introductory offers can raise customer loyalty.
11. Adding information about customer payment timeless (showing is customer late in doing renewal or not) and the type of payment method used (credit card, direct debit, online payment platforms, etc.) will give a better perspective related with finance.
12. Creating average revenue per user in knowing the impact of customer loss to company revenue.

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