

CHAPTER V

CONCLUSION

5.1 Conclusion

This study was conducted with the aim of examining the impact of implementing big data analytics on decision-making processes, forecasting processes, and financial processes at PT. BPD Sumatera Barat. The research involved primary data analysis by distributing questionnaires directly using purposive sampling to 20 employees from the finance and IT departments of PT. BPD Sumatera Barat. The data from the respondents was initially collected and processed using SmartPLS 4.0 for further analysis.

The study concludes that the adoption of big data analytics has a significant positive impact on the decision-making process at PT. BPD Sumatera Barat. This result indicates that with the application of this technology, PT. BPD Sumatera Barat can make better, more informative, and more accurate decisions.

Additionally, the adoption of big data analytics significantly improves forecasting. By enhancing the accuracy of decision-making and financial forecasting, the bank's management can base their strategic decisions on more accurate and relevant data. This reduces the risk of errors and improves financial outcomes.

Furthermore, the adoption of big data analytics positively impacts the financial process. The study shows that big data analytics has great potential to enhance financial performance when implemented well. PT. BPD Sumatera Barat has experienced benefits in terms of profitability and operational efficiency.

Finally, the successful implementation of big data analytics requires ongoing investment in technological infrastructure and employee training. The success of this technology's implementation heavily depends on the bank's ability to integrate big data analytics into existing business processes and ensure that staff have the necessary skills to utilize it effectively.

5.2 Implications

This study highlights the significant impact of implementing Big Data Analytics at PT. BPD Sumatera Barat, particularly in decision-making processes, forecast accuracy, and financial operations. With rapid technological advancements, the use of Big Data Analytics is crucial for financial institutions to remain competitive and responsive to market changes. The research provides deep insights into how Big Data Analytics can be effectively implemented to enhance operational and financial performance in the bank.

The application of Big Data Analytics at PT. BPD Sumatera Barat is expected to enhance decision-making processes. By collecting, storing, and analyzing large amounts of data in real-time, bank management can make more informed decisions based on accurate and relevant data. This not only improves operational efficiency but also helps identify better market opportunities and potential risks.

One of the primary benefits of Big Data Analytics is improved forecast accuracy. By analyzing historical data and market trends, PT. BPD Sumatera Barat can predict market changes more accurately. This allows the bank to adjust their financial and operational strategies more effectively, thereby enhancing stability and profitability. Accurate forecasting also aids in resource planning and better risk management.

Integrating Big Data Analytics into financial processes at PT. BPD Sumatera Barat can significantly impact operational efficiency and effectiveness. Through in-depth data analysis, the bank can identify areas needing improvement and optimize processes such as asset and liability management, credit analysis, and risk control. This not only improves financial performance but also adds value to stakeholders.

PT. BPD Sumatera Barat's ability to adopt and leverage Big Data Analytics can provide a significant competitive advantage. In this digital era, data is a valuable asset. Banks that can effectively process and utilize data will have an edge over competitors

who have not adopted similar technology. This advantage can manifest in better business decisions, more personalized customer services, and faster responses to market changes.

This research is also expected to provide useful insights for other local government banks. By understanding how PT. BPD Sumatera Barat implements Big Data Analytics, other banks can learn and adopt relevant best practices. This will help accelerate digital transformation in the local banking sector and improve the overall performance of these banks.

Furthermore, this research contributes to academic literature by offering a new perspective on the implementation of Big Data Analytics in local government banks. Focusing on PT. BPD Sumatera Barat provides local insights often overlooked in previous research, which predominantly focuses on global contexts. The findings aim to fill research gaps and provide a foundation for further research in this field.

5.3 Limitations and Future Research

Every research study has its inherent limitations and scope for further exploration. In this study, several constraints were identified that may affect the generalizability and applicability of the findings. These limitations open avenues for future research to build upon and address the gaps identified. The following sections outline the primary limitations of this study and offer suggestions for future research directions.

This research is limited to data obtained from PT. BPD Sumatera Barat, which may not fully reflect the conditions of other banks in different regions. Using data from a single source can also limit the generalizability of the findings. Future research could attempt to combine data from various local and regional banks to enhance the generalizability of the research findings. This could also provide a broader perspective on the implementation of Big Data Analytics in different banking contexts.

This study uses a limited sample that may not fully represent the entire population of employees or departments within the bank. The results may differ if a larger or more diverse sample is used. Using a larger and more diverse sample from various departments and management levels within the bank can help identify a more comprehensive impact of Big Data Analytics on decision-making processes and financial performance.

There are insufficient indicators and questionnaire items for each variable, which restricts their ability to accurately reflect the variables and impacts the number of respondents that can serve as samples. To provide a more thorough picture of the variables, it is advised that future researchers expand the number of indicators and questionnaire items. Additionally, this will result in a larger sample size of responses.

This research focuses on PT. BPD Sumatera Barat, which operates in West Sumatra. The findings may not be directly applicable to banks in other regions or countries with different socio-economic conditions. Future studies could explore how Big Data Analytics impacts banks in various socio-economic contexts to provide a more comprehensive understanding of its applicability and benefits.

