

Report on Jyske Bank's Use of SAS Customer Intelligence 360

Abstract

In the rapidly evolving banking sector, Jyske Bank, Denmark's third-largest financial institution, has leveraged SAS Customer Intelligence 360, hosted on Amazon Web Services, to transform its customer interactions and enhance profitability. This report explores the bank's strategic use of advanced analytics, focusing on models like regression analysis for customer value prediction, and supervised and unsupervised learning for customer segmentation and behavior analysis. These tools are designed to deepen understanding of customer needs, predict trends, and personalize services, ultimately improving customer satisfaction and profitability. The report also covers the critical data requirements, integration strategies, and the necessary frequency of data updates that support these models, illustrating how strategic data analytics can revolutionize customer service and operational efficiency in banking.

Introduction

Jyske Bank, established in 1967 and now Denmark's third-largest bank, has embarked on a transformative journey in response to the rapidly evolving digital banking landscape. With a robust workforce of 3,940 employees and an equity of 42.6 billion DKK, the bank is integrating SAS Customer Intelligence 360, a sophisticated analytics platform hosted on Amazon Web Services (AWS). This initiative aligns with the growing customer demand for digital, convenient, and personalized banking services, driven by technological advancements across industries. By adopting this platform, Jyske Bank aims to enhance the banking experience, fostering customer loyalty and increasing profitability by meeting and exceeding modern customer expectations. The deployment of SAS Customer Intelligence 360 is pivotal for Jyske Bank's strategy to modernize customer interactions. This platform offers extensive capabilities in data management, analytics, machine learning, and artificial intelligence, designed to tailor marketing strategies and optimize the customer journey across various digital channels. Additionally, leveraging AWS for this system ensures scalability, reliability, and security, facilitating the handling of large data volumes and adapting to fluctuating demands without sacrificing performance. This strategic move is part of Jyske Bank's broader digital transformation efforts aimed at improving operational efficiency and innovating service offerings, positioning the bank to thrive in a competitive market environment.

Jyske Bank – Facts & Figures



650,000

individual customers



71,000

corporate customers



US\$6.1 billion

in equity [42.6 billion DKK]

Analytical Framework

The deployment of SAS Customer Intelligence 360 at Jyske Bank marks a significant step towards harnessing the power of analytics to enhance customer interactions and operational efficiency. This section delves into the specific analytical models employed, the data required to fuel these models, and the integration and refresh strategies that ensure their effectiveness.

1. Predictive Analytics: Regression Models

- **Objective:** To forecast customer profitability and predict future behaviors based on historical interactions and transaction data. These models help identify high-value customers and anticipate their needs, thereby enabling more effective cross-selling and up-selling strategies.
- **Data Needs:** Extensive datasets including but not limited to account transaction histories, loan and deposit details, demographics, and prior interactions with the bank's digital tools.
- **Update Frequency:** Updated quarterly to incorporate the latest customer activity and behavior trends, ensuring that the predictions remain relevant and accurate.

2. Customer Segmentation: Supervised Learning

- **Objective:** To classify customers into distinct segments based on their financial behaviors, preferences, and responsiveness to past marketing initiatives. This segmentation enables personalized marketing and service delivery, improving customer satisfaction and engagement.
- **Data Needs:** Data elements include age, income levels, investment types, account types, usage of banking channels, and responses to previous marketing campaigns.
- **Update Frequency:** Segments are reviewed and refined bi-annually to adapt to changes in customer behavior and external economic factors that may influence banking habits.

3. Market Basket Analysis: Unsupervised Learning

- **Objective:** Utilizing clustering techniques to uncover associations and hidden patterns among products and services that customers use. This analysis helps in designing product bundles that can be marketed to customers, enhancing convenience and increasing uptake.
- **Data Needs:** Transaction data, interaction data with digital platforms, and utilization rates of banking products and services.
- **Update Frequency:** Conducted annually, or more frequently if new products are introduced or significant changes in customer usage patterns are observed.

4. Resource Allocation: Optimization Models

- **Objective:** To optimize the allocation of resources across various marketing channels to ensure the best returns on investment. These models help in determining the most effective ways to engage different customer segments, considering the cost of channels and historical effectiveness.
- **Data Needs:** Campaign spending, channel performance metrics, customer acquisition costs, conversion rates, and historical data on customer engagement through different channels.
- **Update Frequency:** After each major campaign to refine the allocation of budgets and resources for future campaigns based on learned efficiencies and customer responses.

5. Customer Journey Mapping: Simulation Models

- **Objective:** To simulate different customer journey scenarios using digital banking tools to predict outcomes and optimize user experiences. These models provide insights into potential roadblocks or friction points in the digital banking process.
- **Data Needs:** Customer feedback, digital interaction logs, transaction completion rates, and service request histories.
- **Update Frequency:** Continuously updated as new services are launched or existing services are modified to ensure that customer journeys remain efficient and user-friendly.

Data Collection and Integration

Jyske Bank's implementation of SAS Customer Intelligence 360 necessitates a robust framework for data collection and integration. Data is drawn from various internal systems such as core banking systems, CRM platforms, and digital engagement tools. External data, such as economic indicators and market trends, are also integrated to provide a comprehensive view of the business environment.

Challenges and Solutions in Data Integration

- **Challenge:** Ensuring data quality and consistency across different sources can be difficult.
- **Solution:** Implementing stringent data governance practices and employing advanced data cleansing and preparation tools.

Security and Compliance:

- Data security is paramount, especially in the financial sector. Jyske Bank employs advanced encryption and access control mechanisms to protect customer data, in compliance with regulatory requirements like GDPR.

By aligning data collection with analytical needs and ensuring rigorous data governance, Jyske Bank can leverage SAS Customer Intelligence 360 effectively to transform its customer engagement strategies and operational efficiencies. This detailed analytical framework provides a blueprint for integrating advanced analytics into banking operations, driving innovation, and enhancing customer satisfaction.

Challenges and Opportunities

Challenges:

- **Data Silos:** Integrating data from diverse systems within the bank can be challenging.
- **Change Management:** Encouraging adoption of new digital tools among staff and customers.

Opportunities:

- **Enhanced Customer Experience:** Personalized experiences can increase customer satisfaction and loyalty.
- **Operational Efficiency:** Analytics can streamline operations and reduce costs.

Conclusion

Jyske Bank's deployment of SAS Customer Intelligence 360 on Amazon Web Services illustrates a forward-thinking approach to digital banking. By leveraging sophisticated analytics models, the bank aims to enhance customer experiences, thereby increasing loyalty and profitability. This case study serves as a blueprint for other financial institutions aiming to integrate advanced analytics into their service delivery.

References

1. Jyske Bank Annual Reports
2. SAS Customer Intelligence 360 Whitepapers
3. Amazon Web Services Financial Services Documentation
4. https://www.sas.com/en_us/customers/jyske-bank.html