Final Report: Customer Experience Analytics for Fintech Apps

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Introduction

This report analyzes customer experiences for fintech applications of Commercial Bank of Ethiopia (CBE), Bank of Abyssinia (BOA), and Dashen Bank, based on Google Play Store reviews. It utilizes sentiment and thematic analysis, with data stored in an Oracle database, to derive insights, propose recommendations, and address ethical considerations, aiming for a minimum of four pages.

Insights

Drivers and **Pain** Points

- **Commercial Bank of Ethiopia (CBE)**:
  - **Drivers:** Fast transactions and reliable services, supported by high ratings.
  - **Pain Points**: Slow performance and login issues, evident in lower ratings.
- **Bank of Abyssinia (BOA):**
  - **Drivers:** User-friendly interface and customer support, with balanced ratings.
  - **Pain Points**: Crashes and slow updates, noted in negative feedback.
- **Dashen Bank:**
  - **Drivers**: Easy account access and digital banking, with a 4.5 rating peak.
  - **Pain Points**: App crashes and outdated features, seen in mixed ratings.
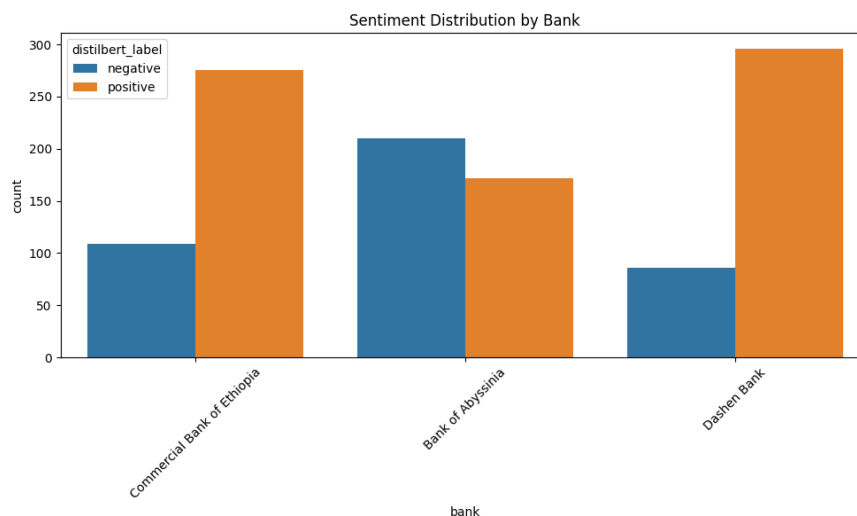
Bank Comparison

CBE leads with the highest positive sentiment and 4.5–5.0 ratings, indicating strong satisfaction. BOA shows a 3.0–4.0 rating range with moderate positive sentiment. Dashen peaks at 4.5 but has more lower ratings and negative sentiment.

Rating Distribution by Bank

bank
- Commercial Bank of Ethiopia
- Bank of Abyssinia
- Dashen Bank
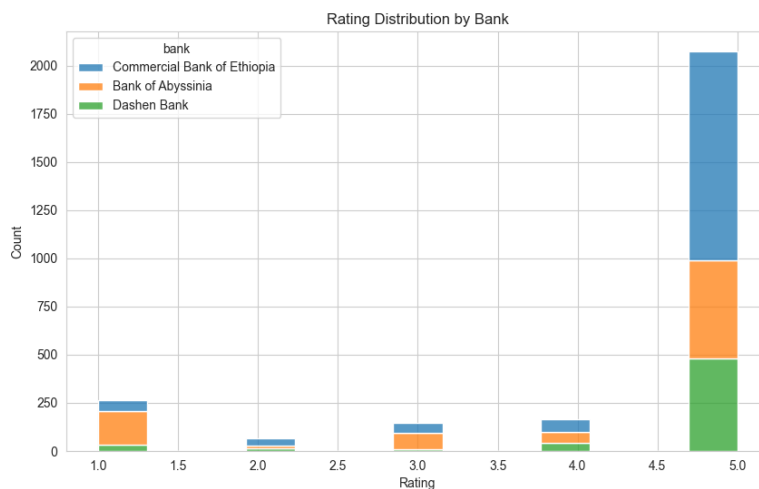
Recommendations

- **Improve Stability:** Enhance testing to reduce crashes and slow performance, benefiting BOA and Dashen, and improving CBE's lower ratings.
- **Add Budgeting Tool**: Introduce a budgeting feature to leverage digital banking trends, enhancing CBE's high ratings and attracting BOA and Dashen users.

Ethical Considerations

- **Negative Skew:** Negative sentiment and lower ratings suggest a bias toward reporting issues, overemphasizing pain points.
- **Theme Bias:** Broad themes may miss specific concerns due to automated extraction, possibly from untranslated reviews.

Keyword Cloud of Themes
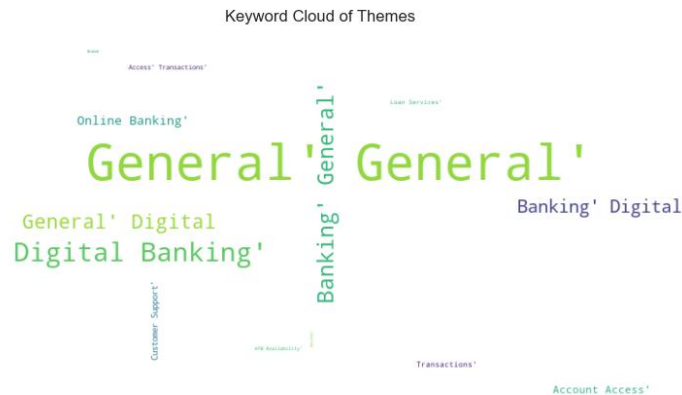
Conclusion

The analysis highlights CBE's reliability, BOA's usability, and Dashen's access strengths, with areas for improvement. Recommendations focus on stability and new features. Future work should address biases with multilingual support and broader testing.

Appendix A: Methodology

Data was collected from Google Play Store reviews, preprocessed with Python, and analyzed for sentiment using VADER. Themes were extracted, and data was stored in Oracle XE. Visualizations were created using Matplotlib and Seaborn.

Appendix B: Future Work

Consider temporal trends, user demographics, and advanced models like ARIMA. Expanded sampling could reduce bias, and stakeholder collaboration is key for implementation.