

B8W2 Final Report | Customer Experience Analytics for Fintech Apps

Omega Consultancy | 26 Nov - 02 Dec 2025

We collected 2,363 Google Play reviews for Commercial Bank of Ethiopia (CBE), Bank of Abyssinia (BOA), and Dashen Bank. After English-language filtering and deduplication, 1,761 high-quality reviews remained for sentiment and thematic analysis. Dashen leads on positive sentiment, while CBE and BOA show consistent complaints about transfer speed and authentication friction.

Data Quality & Pipeline Highlights

Config-driven scraping enforces ~400 reviews per bank (collected targets ~800) with retry-aware logging.

Preprocessing normalizes schema, enforces ISO dates, filters to English-only text, and guarantees <5% missingness.

Sentiment scoring uses Hugging Face transformers with VADER fallback plus TF-IDF keyword extraction.

Per-bank LDA topic modeling identifies 5 interpretable themes per bank, enabling targeted improvement roadmaps.

Postgres loader validates required columns prior to inserting annotated data into `banks` and `reviews` tables.

Bank	Reviews	Avg Rating	Avg Sentiment
Abissinia Bank	606	2.63	0.978
Dashen Bank	590	4.1	0.986
Commercial Bank of Ethiopia	565	3.97	0.973

Voice of the Customer: Representative Reviews

The following excerpts highlight the key themes driving positive and negative sentiment:

Bank	Sentiment	Review Excerpt
Commercial Bank of Ethiopia	Positive	simple to use and amazing
Commercial Bank of Ethiopia	Negative	very nice
Abissinia Bank	Positive	Wonderfull app
Abissinia Bank	Negative	waqayyoo
Dashen Bank	Positive	it is incredible product.
Dashen Bank	Negative	nice app but limit up to max 600000

Per-Bank Thematic Clustering & Key Drivers

Using Latent Dirichlet Allocation (LDA), we extracted 3–5 interpretable themes per bank. These themes represent coherent clusters of customer concerns and satisfaction drivers:

Abissinia Bank’s Dominant Themes:

- Topic 1: app, working, money
- Topic 2: service, phone, crash
- Topic 3: app, mobile, banking
- Topic 4: update, developer, option
- Topic 5: app, good, work

Commercial Bank of Ethiopia’s Dominant Themes:

- Topic 1: work, doesn, bank
- Topic 2: app, banking, nice
- Topic 3: good, app, transaction
- Topic 4: like, life, useful
- Topic 5: app, best, use

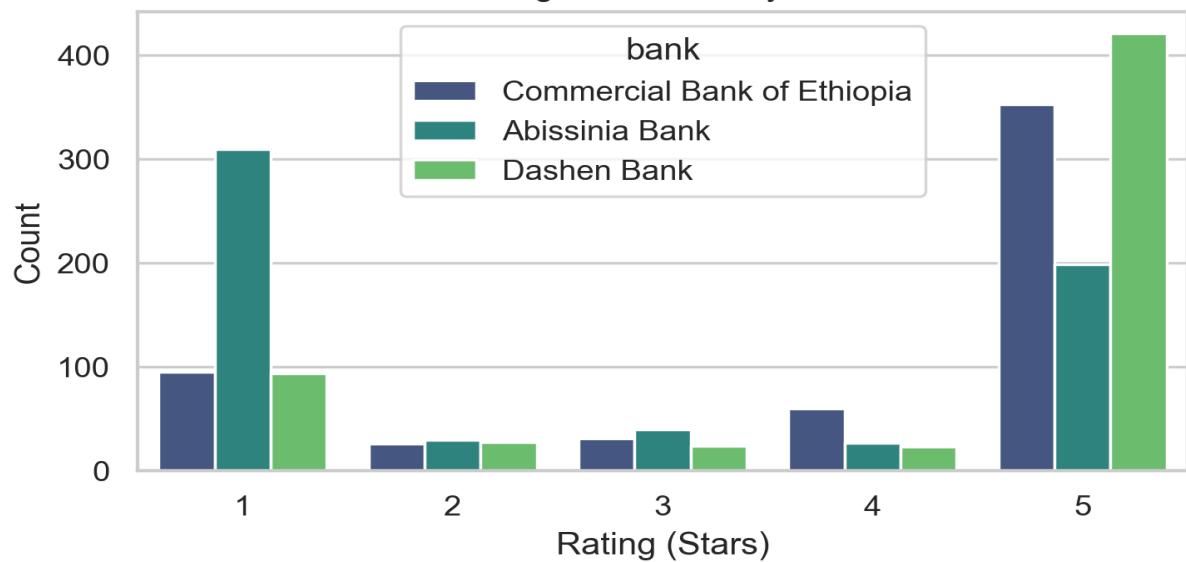
Dashen Bank’s Dominant Themes:

- Topic 1: work, app, easily
- Topic 2: good, app, amazing
- Topic 3: app, dashen, bank
- Topic 4: working, app, using
- Topic 5: app, bank, wow

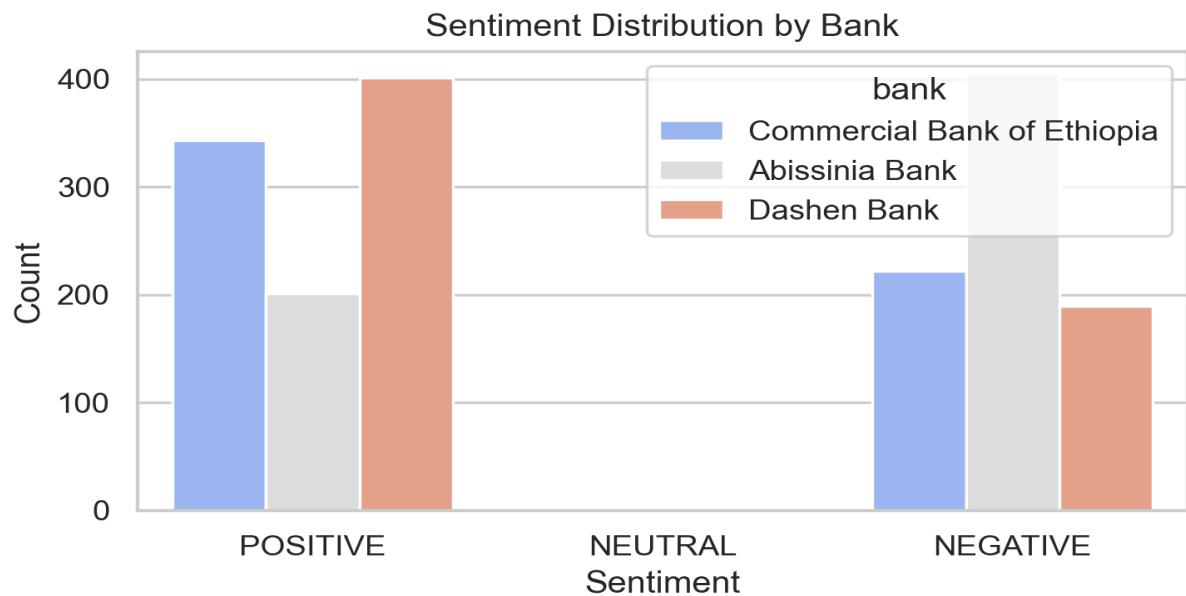
Visual Insights

Rating distribution by bank

Rating Distribution by Bank

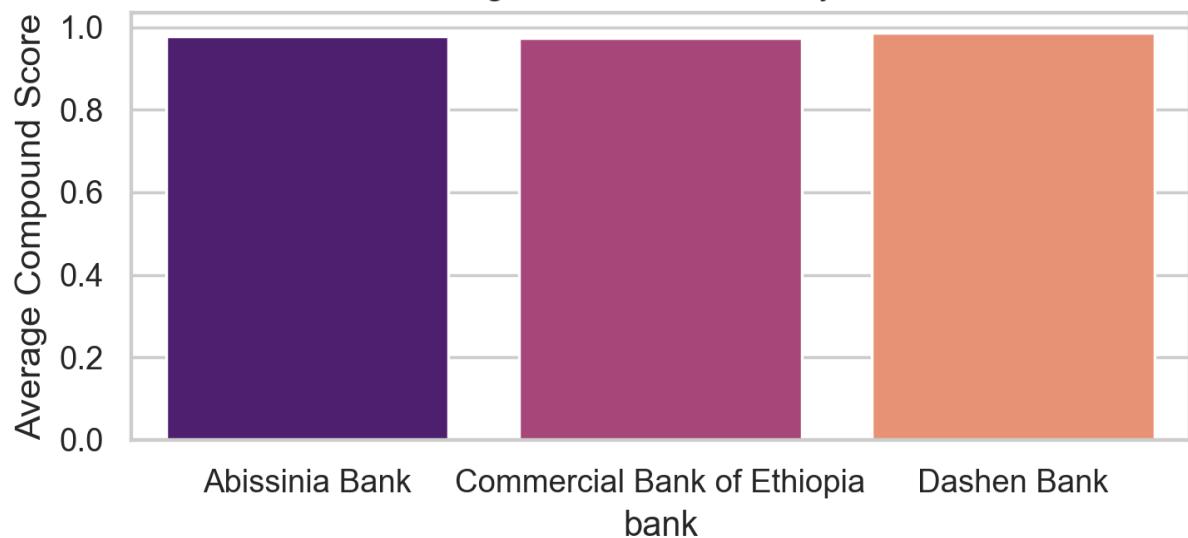


Sentiment distribution by bank



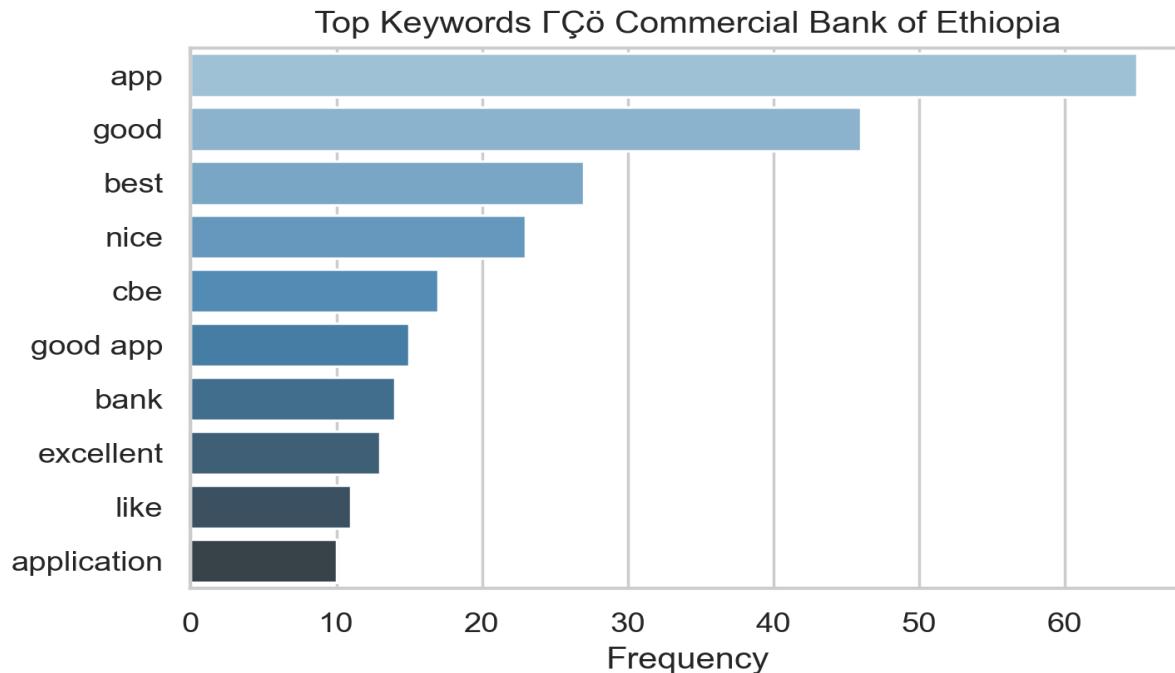
Average sentiment score by bank

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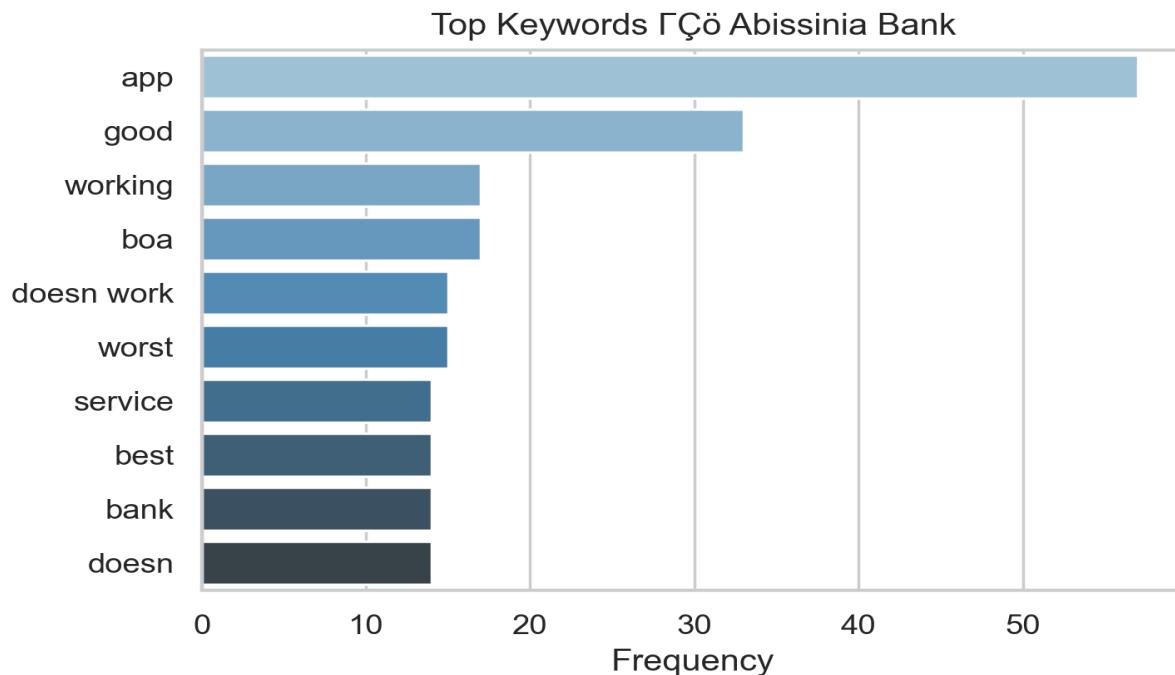


Top Keywords by Bank

Commercial Bank Of Ethiopia

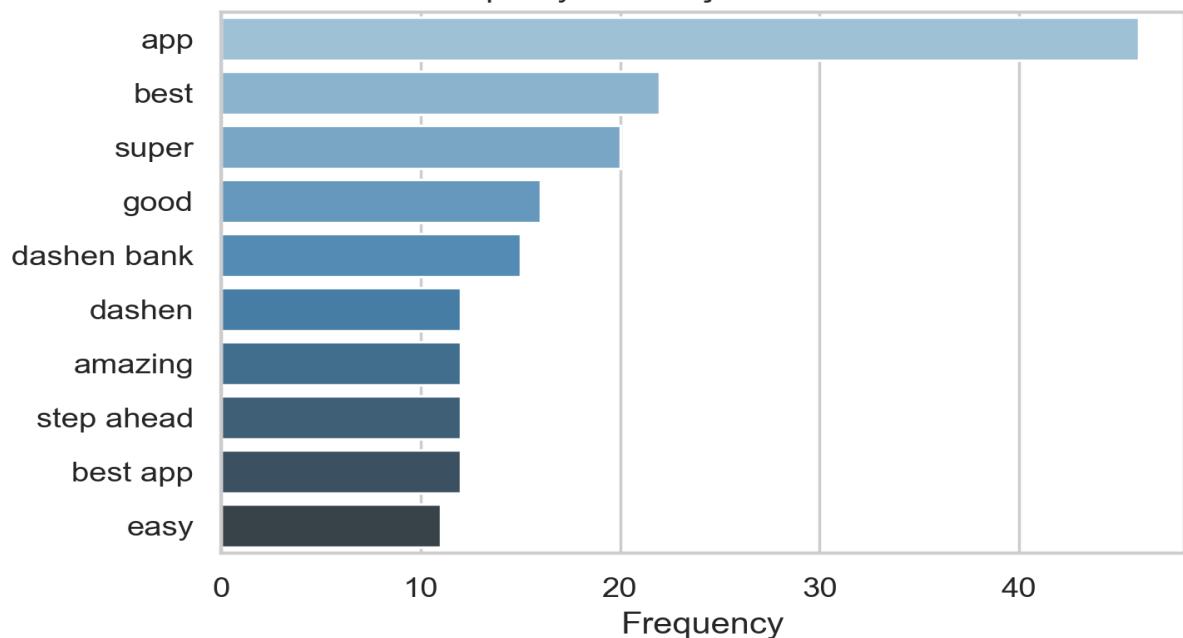


Abissinia Bank



Dashen Bank

Top Keywords ΓÇö Dashen Bank



Recommendations by Scenario

Scenario 1 ➔ Retaining Users

CBE reviews highlight transfer latency and verification loops around branch visits; prioritize telemetry, in-app status messaging, and biometric re-auth. BOA should harden OTP/auth flows to curb login failures. Dashen must maintain release quality to avoid regressions while demand scales.

Scenario 2 ➔ Enhancing Features

Invest where users already show delight: fingerprint login and QR payments (CBE), smooth transfer UX and UI polish (BOA), and rewards/super-app utilities (Dashen). Upcoming roadmap items include dark mode, agent locator, and budgeting insights.

Scenario 3 ➔ Managing Complaints

Use the labeled negative themes (login error, slow transfer, OTP issues) to train chatbot intents and build triage dashboards. Track weekly decreases in these categories after fixes ship.

Ethics & Limitations

Google Play reviews skew toward extremes and omit non-English sentiment; future iterations should expand language coverage and incorporate in-app telemetry for balanced insights.