

Case Study: Enhancing Debt Collection Efficiency through Data-Driven KPIs and Customer Sentiment Analysis

Client Overview

The client is one of the leading private sector banks in India. The Client's loan collections team handles overdue accounts, aiming to recover outstanding debts while maintaining positive relationships with customers. The Client places a high priority on regulatory compliance and strives for a professional, respectful approach in customer interactions.

Business Challenges

Client faced several challenges in their loan collections process

- Low Collection Rates: The team struggled to recover outstanding loans efficiently, impacting overall performance.
- **Customer Frustration:** Many customers expressed frustration during collection calls, which led to negative customer experiences and lowered the likelihood of repayment.
- Agent Compliance: Ensuring that agents followed all regulatory and internal compliance guidelines was a continuous challenge.
- Limited Insights: Existing systems lacked the ability to track customer sentiment, call disposition, or specific phrases used during calls, which made it difficult to optimize interactions.

Objectives

Client set out to achieve the following objectives:

- Increase Collection Rates: Drive higher loan recovery rates by improving the effectiveness of each customer interaction.
- Enhance Customer Experience: Reduce customer frustration and improve cooperation by understanding and responding to sentiment.
- Ensure High Compliance Standards: Improve adherence to regulatory and internal guidelines to mitigate legal risks.
- Optimize Call Strategies with Data: Use detailed metrics on call outcomes, customer sentiment, and agent performance to refine strategies and prioritize follow-ups.

Solution

To address these challenges, Client implemented a comprehensive KPI-driven framework for their loan collections process. The solution consisted of Data Integration, AI and Data Visualization component.

Data Integration

- The data was extracted from the sources like CRM, Excel Worksheets & Audio Call transcripts
- An ODS & Data Mart was designed to persist the most recent and historical data. ODS was designed for ad-hoc querying
- ETL jobs were developed to extract the data from the source systems and load the ODS and the Data Mart



Al Layer

 Large Language Model was used to process the audio call transcripts to extract the details about sentiments, keywords, phrases, unlawful words, promise to pay intents etc

Data Visualization Layer (KPIs and Key Metrics)

Following KPIs and metrics were delivered:

Customer Tone Sentiment Analysis

Purpose: Track customer sentiment (positive, neutral, or negative) during calls to understand reactions and adjust agent communication accordingly. - Implementation: Integrated AI-based sentiment analysis to provide real-time and post-call insights into customer tone, helping agents adjust their approach.

- Call Disposition Types / Call Intent
 - Promise to Pay (PTP): Customer commits to making a payment by a specified date
 - Right Party Contact (RTP): Successful contact with the loan holder.
 - Callback Request: Customer requests a follow-up call at a later date.
 - Purpose: Categorize call intents to prioritize follow-up actions and focus on higher probability recovery calls.
 - Implementation: Agents recorded disposition types in a CRM system, which allowed the team to monitor and analyze call intents for more effective follow-up strategies.
- Compliance Rate for Collection Progress
 - Measure agents' adherence to compliance requirements, including regulatory disclosures and ethical standards.
- Sentence Phrase Tracking Identify and promote the use of positive, cooperative language that improves customer sentiment and leads to higher payment commitments
- Promise to Pay (PTP) Rate: Percentage of calls resulting in a commitment to pay by a specific date.
- Right Party Contact (RTP) Rate: Measures the percentage of calls reaching the loan holder or decision-maker.
- Callback Request Rate: Tracks follow-up requests, helping plan future interactions.
- Compliance Rate: Measures the percentage of calls meeting regulatory and internal standards.
- Effective Phrase Usage Rate: Tracks usage of phrases proven to increase customer cooperation and commitment.

Outcomes after Solution Implementation

Following the implementation of this KPI framework and collection strategy, Client saw notable improvements in both collection performance and customer experience

- Collection rates improved by 20% as agents focused on PTP and RTP calls, guided by real-time call disposition insights.
- Sentiment analysis revealed a 25% reduction in negative customer responses, with more calls rated as neutral or positive. Agents received empathy training based on sentiment insights, helping to foster a cooperative atmosphere during calls.
- Compliance rates rose from 82% to 96%, reducing legal risks and enhancing customer trust.



- Improved Follow-Up Strategy: Using data on call disposition types, Client focused on follow-ups on customers most likely to pay. PTP calls were prioritized, leading to faster recovery times and more efficient use of agent time.
- Sentence phrase tracking showed that agents using recommended phrases secured PTP commitments 30% more often than those who didn't, significantly contributing to collection success.

Conclusion

The targeted, KPI-driven approach provided Client with measurable insights that transformed their collection process. By analyzing customer tone sentiment, tracking call disposition types, ensuring compliance, and promoting effective language, Client achieved improved collection rates and enhanced customer interactions. The case demonstrates that a data-driven strategy focusing on detailed KPIs and sentiment analysis can optimize collection efforts, reduce customer frustration, and drive outcomes while ensuring a positive, compliant approach.