



RubiCube

# Improving Customer Experience by Analyzing Customer Feedback



A Case Study by  
**CI Global and RubiCube**

## Executive Summary

Integrating Property Management Systems (PMS) and sentiment analysis for customer feedback represents a groundbreaking approach that harnesses technology to enhance the hospitality industry's ability to understand and respond to guest experiences. The front office in a hotel serves as the nerve center of a hotel's operations, collecting vast amounts of data on reservations, check-ins, check-outs, and more. Property management systems (PMS) collect vast amounts of data. Sentiment analysis leverages natural language processing and machine learning to decipher the PMS data, such as customer feedback from online reviews, surveys, or direct communication.

This fusion of PMS and sentiment analysis empowers hotels to transform raw data into actionable insights.

### Goals



Improve customer feedback management.



Enhance guest satisfaction and loyalty.



Streamline operations and data-driven decision-making.

### Challenges

Hotels face difficulties in effectively gathering and analyzing feedback from various sources, leading to delayed responses and missed opportunities for improving guest experiences.

- Managing feedback from diverse sources like online reviews, surveys, and direct interactions is challenging.
- Key hurdles include data collection, organization, and analysis.
- Traditional manual feedback management is time-consuming, causing delays in responses and missed opportunities.

Clients in the hospitality sector need an automated solution to streamline feedback management.

## Solution

CI Global leveraged RubiCube to develop an integrated system combining PMS data with sentiment analysis. This system automated the feedback management process, categorized sentiments, and generated tailored responses.



## Sentiment Analysis Implementation

**Data Preprocessing:** Cleaned feedback data to ensure quality for analysis.

**Tokenization:** Split text into words for easier processing.

**Sentiment Scoring:** Assigned sentiment scores (negative, neutral, positive) using NLTK.

**Aggregation:** Combined sentiment scores to classify overall feedback sentiment.

**Example Categorization:** Categorized reviews like "clean and comfortable" as positive and "slow and disappointing" as negative.

**Automation:** Applied sentiment analysis automatically for quick and consistent categorization.

**Response Generation:** Automated responses tailored to feedback sentiment for timely and effective replies.

## Key Findings

- Automated sentiment analysis for swift feedback categorization.
- Tailored response generation based on sentiment.
- Streamlined data collection and integration for a comprehensive view of guest experiences.

## Results

- **Improved Feedback Management:** Automated system streamlined the handling of customer feedback.
- **Faster Response Times:** Reduced time to categorize and respond to feedback.
- **Enhanced Guest Satisfaction:** Enabled personalized and prompt responses to guest concerns and praises.
- **Increased Efficiency:** Automated processes saved time and resources.
- **Boosted Guest Loyalty:** More effective feedback management led to higher guest satisfaction and retention.

## Conclusion

CI Global's RubiCube's solution has set a new standard in the hospitality industry by leveraging technology to transform guest feedback into actionable insights. This innovative approach promises to elevate guest experiences and streamline hotel operations, driving long-term success. Visit CI Global today to explore how our solutions can revolutionize your business.

## About CI Global

Since 1998, CI Global has been empowering businesses by providing comprehensive technology solutions, including ERP systems, product development, cloud transformation, and mobile app development. Our experienced team is dedicated to driving innovation, ensuring smooth transitions, and delivering projects on time. Whether you're modernizing your infrastructure or developing new software, we help you stay ahead in a rapidly evolving tech landscape.

**25+** years of software product engineering | **1500+** product releases | **350+** customers across the world

## About RubiCube

RubiCube is a versatile data analytics platform that seamlessly integrates with your existing systems like CRM, POS, and ERP, providing real-time insights and automating processes to resolve business complexities. With RubiCube, businesses can enhance decision-making, predict trends, and drive growth across industries.

