CASE STUDY

Natural Language Processing Sentiment Analysis Helps a US Drug Manufacturer Reduce Customer Churn by 57%

Engagement Summary

> With the advent of technology across all industries, business leaders and decision-makers are now revamping their approach to serve their consumers. The pharmaceutical industry is one of the industries trying to stay up to date with technological advancements and new approaches to reach the customers. Enhancing customer experience and satisfaction is crucial for pharma companies. Natural Language Processing (NLP) sentiment analysis in such situations helps with data mining, identifying, and quantifying the strings of texts on social media or web.
> A pharmaceutical industry giant approached Quantzig with one such issue and wanted to leverage our expertise in NLP sentiment analysis in healthcare to reduce customer churn rates.

The Client

The client is an American pharmaceutical and biotechnology firm, headquartered in Boston. This client is a pioneer name among the US generic drug manufacturers. They mostly develop medicines that treat cardiovascular diseases, arthritis, and other ordinary to severe medical conditions.

Business Challenge

This drug manufacturer was using social listening tools for social analysis but with the increased amount of data generated through social media, they were failing at capturing and analyzing the correct sentiment. They approached Quantzig to leverage its expertise in NLP sentiment analysis, and opinion mining and sentiment analysis to analyze their social media data. The key problems included-

Problem statement 1

> *Identify key emotional triggers – With Quantzig's opinion mining and sentiment analysis, this US generic drug manufacturer wanted to identify the messages and conversations that act as emotional triggers that may change customer behavior.*

Problem statement 2

> *Enhance customer service – This US generic drug manufacturer was facing challenges with identifying the best approach for each segment of customers. With NLP sentiment analysis the client wanted to help their human agents to easily identify the best approach for adaptive customer service.*

Problem statement 3

> *Crisis management – The client had recently made changes in their customer service strategy and their customers did not seem too happy with the new approach. Thus, with NLP sentiment analysis, opinion mining, and sentiment analysis, the client wanted to monitor their social media networks to mitigate brand damage.*

Solution Offered

By collaborating with Quantzig, the client was able to gain access to social media reactions and responses that allowed them to gain a better understanding of the actual interaction between customers and their products. This client was also running several digital marketing activities. NLP sentiment analysis combined with opinion mining and sentiment analysis helped the client refine their digital marketing communication strategy by providing better support and transparency through up-to-date information. Quantzig's excellent sentiment analysis and specially curated sentiment analysis of pharmaceutical products helped the client quickly analyze and visualize the KPIs.

Business Outcome

Quantzig's sentiment analysis of pharmaceutical products helped the client go beyond reframing the human agents. With NLP sentiment analysis, the client was able to redesign and train their chatbots to recognize and respond according to the customer's mood. The key business outcomes of this NLP sentiment analysis were-

1. Trained and advanced chatbots
2. Adaptive customer service
3. Reduce customer churn by 57% during FY 19-20
4. Redefine digital marketing strategy
5. Efficient crisis management