How Sentiment Analysis in Virtual Assistants Facilitates Service Recovery

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One of the key reasons why enterprises implement AI-powered chatbot or virtual assistant solutions is to enhance their customer experience. The swift and seamless support offered by virtual assistants enables customers to get things done in a faster, simpler and easier way - enriching their interactions with businesses, boosting retention, and helping build long-term customer loyalty. In order to unlock the true potential of Conversational AI to deliver great CX however, it is crucial for brands to know how their customers feel during their engagement with the business. And that's where Sentiment Analysis comes in.

Sentiment Analysis is a feature that allows a virtual assistant to determine the emotion behind a customer's message. It is essentially an added layer on top of the virtual assistant's Natural Language Understanding (NLU) engine, which gives it the ability to decode the 'mood' of a user through analyzing speech patterns and sentence structure. To put it another way, Sentiment Analysis gives virtual assistants a kind of simulated 'emotional intelligence'.

According to an Opus Research Survey, **72% of brands trust in sentiment analysis to enhance customer experience.** The ability to gauge how their customers feel about their experience with the brand is very useful when it comes to facilitating service recovery i.e. taking steps to turn negative customer experience into a positive one, thus potentially converting dissatisfied customers into happy customers and even brand loyalists.

This e-book will highlight how AI-powered virtual assistants equipped with Sentiment Analysis can aid businesses with service recovery, with a focus on four key use cases:
ith service recovery, with a focus on four key use cases:

- **Real-Time Course Correction**
- **Evaluating Customer Care Staff**
- **Process Improvement**
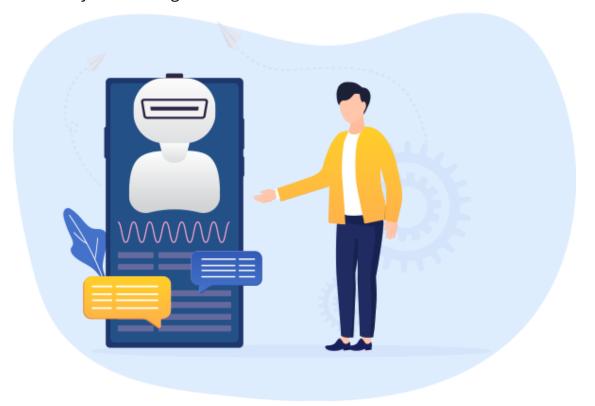- **Measuring Customer Satisfaction**

Sentiment Analysis in Virtual Assistants: How It Works

Before diving deeper into how it helps with service recovery, let us first get a better understanding of how Sentiment Analysis works in chatbots and virtual assistants.

Sentiment Analysis is essentially a subcategory of **Natural Language Understanding (NLU)** and **Machine Learning (ML)** - the technologies that give Conversational AI its 'intelligence'. NLU is what enables a virtual assistant to perceive and evaluate customer information, while ML improves a virtual assistant's performance over time based on past conversational data.

A Sentiment Analysis module is built by training an ML model on a large number of annotated sentences and their respective sentiments. Once the model is fully trained, it is able to classify live messages into one or more sentiments.

This is How a Virtual Assistant Detects and Interprets Customer Sentiment:

1.

The virtual assistant detects the sentiment in the user's messages and analyzes it for emotions like anger, frustration, sadness, happiness, optimism etc. Based on this, it can gauge if the mood behind the conversation is positive, negative or neutral.
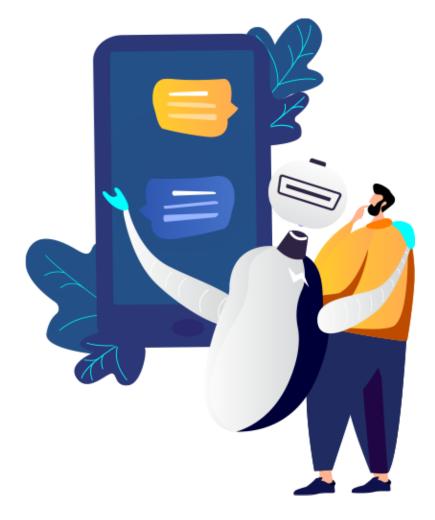
2.

Leveraging its NLU and ML capabilities, the assistant calculates the magnitude of these emotions, and puts a numerical score to them.

3.

Based on the outcome of the sentiment analysis, the assistant can take certain steps to drive the conversation in the appropriate direction. For e.g. if the score indicates a negative sentiment, then the assistant can transfer the conversation to a live agent, or execute tasks to mitigate the situation on its own and improve the customer's experience.

Sad - 0.236   Afraid - 0.144

Angry - 0.493   Happy - 0.127

How Sentiment Analysis Aids Service Recovery

A report by Microsoft revealed that 56% of customers globally have stopped doing business with a brand, or switched to a competitor, due to a negative customer service experience. This makes effective service recovery crucial for brands to ensure customer retention.

Here are some use cases for Sentiment Analysis in virtual assistants that can help businesses with service recovery.

1.
Real-Time
Course Correction

One of the swiftest and most effective ways to turn a negative customer experience into a positive one is to simply course-correct on an active conversation with a customer. A virtual assistant equipped with sentiment analysis can detect the sentiment of a user, and adjust the tone of its communication accordingly. So if the assistant detects that the customer is angry or frustrated, it can modify its responses in order to calm the user down, and offer solutions to alleviate the situation by resolving the user's issue.

For brands that are using an AI + Human hybrid model for customer care, sentiment analysis can help with the prioritization of conversations to be routed to human agents. Conversations in which negative sentiment is detected can be prioritized for assignment to an agent, based on the magnitude of the negative assignment (i.e. the more irate or upset the customer, the higher the priority to auto-route him to an agent), whereas conversations with positive sentiment could be continued with the virtual assistant.

The idea is to ultimately offer customers who are having a bad experience the path to least resistance towards getting their issues resolved, and making their experience positive - be it through an empathetic and helpful-sounding chatbot, or through a human agent.

2.
Evaluating
Customer Care Staff

A brand's service recovery strategy is ultimately only as good as its customer care agents. While virtual assistants can resolve the vast majority of routine queries, when complex customer issues are involved, the human touch becomes essential. But how effective are the brand's human agents when it comes to handling angry or upset customers the right way, and effectively solving their problems? Sentiment analysis can provide the answer to that question.

When human agents use the Live Agent Chat dashboard of a Conversational AI platform to engage with customers, the platform's sentiment analysis capabilities can provide real-time feedback on the agent's ability to help customers who are having a negative experience.

This provides the business with valuable information when it comes to evaluating the overall performance of its customer care staff. The data gathered also provides valuable insights and learnings which can be used to train staff to better handle similar customer interactions, as well as for the training of new hires on a support team.

3.

Customer Feedback & Process Improvement

Sentiment analysis in virtual assistants can be leveraged on a larger scale by brands to identify aspects of their existing processes and practices that are contributing to poor customer experience, and take corrective action. Virtual assistants serve as a real-time source of consumer data, and through constant sentiment analysis on this data, businesses will be instantly alerted to negative feedback about their processes, and positive feedback about any improvements made.

Through virtual assistants, brands can essentially collect customer feedback without needing to explicitly administer a survey, which may or may not be completed by the virtual assistant's users. Instead, they can identify processes that involve a high degree of effort on the customer's part, leading to frustration and churn, based on the customer's sentiments, by analyzing the conversational data.

Acting upon customer feedback in a timely manner, and making constant improvements, is a key aspect of any successful service recovery strategy, and sentiment analysis allows this to be a real-time process.
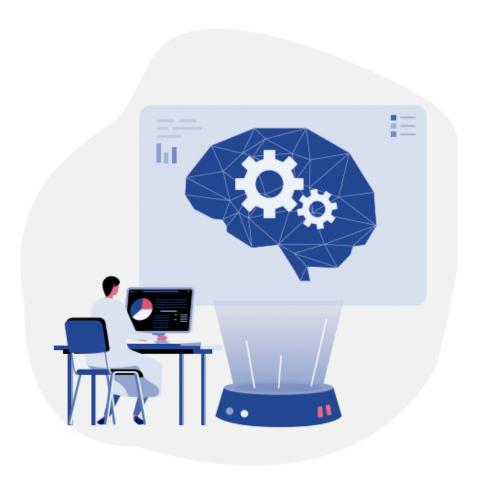
4.

Measuring Customer Satisfaction

Ultimately, sentiment analysis is a powerful tool for businesses to gauge the overall customer sentiment towards their products and services, as well as the prevailing customer perception of and attitudes towards their brand. This provides them with valuable insights on how customers feel about them, which in turn can shape their future approaches to customer engagement.
Sentiment analysis is very useful when it comes to customer segmentation based on their satisfaction levels. Based on an analysis of the conversational data (gathered by the virtual assistant's interactions with users), brands can identify 'unhappy' or 'demanding' customers, and segment them appropriately.

Customers with the most negative sentiment, who are at risk of churn, can be prioritized for service recovery. Demanding customers can be handled with extra care so as to avoid further negative sentiment. And happy customers can be rewarded and nurtured to build lasting brand loyalty.

In Conclusion

As AI-powered virtual assistants increasingly become the predominant customer engagement tool for brands, it becomes all the more crucial for them to not only know what customers want, but also how they feel. Great customer service is not just about executing tasks to resolve customer issues, but also about managing the emotions and sentiments of customers the right way in order to ensure that every interaction with the brand ends on a positive note. In this context, sentiment analysis becomes a key tool in the business' customer experience arsenal.

Formerly angry and frustrated customers who are won over by a positive experience can potentially become even greater loyalists of a brand, which is what makes a great service recovery a worthwhile pursuit for businesses. Service recovery relies on having the tools to pinpoint where existing processes are failing customers, and making timely interventions to rectify this. And as we've established, a virtual assistant with the ability to perform sentiment analysis is certainly one of those tools.

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Haptik is an artificial intelligence company powering conversational assistants for brands to transform customer experiences. The platform has enabled over 100 virtual assistants, reaching close to 100 million devices and processing over 3 billion end customer interactions. Haptik is backed by Reliance Industries, a $100 Billion+ conglomerate, with close to 500 million customers.

To learn more about our solutions, reach out to us at enterprise@haptik.ai

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