Interpreting customer sentiment for unlocking real-time insights

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Motivation

Consumer purchase takes place in the physical and digital marketplace. With better availability of technology and more convenience, the share of transactions in the digital marketplace is only going to increase. This poses a challenge for businesses. They never actually meet the customers to understand and observe their buying behavior. Leaders in the digital marketplace like Amazon have embraced technology to solve this problem.

Huge volumes of unstructured business data are generated every day. Data is captured to tackle a known business problem or a purpose not yet envisioned. The aspect of a business that the competitors cannot replicate is the intelligence about the customers that they possess. As more data about the customers is generated, the key to increasing customer acquisition and retention will be in the hands of those who can most effectively and efficiently turn this data into an actionable asset.

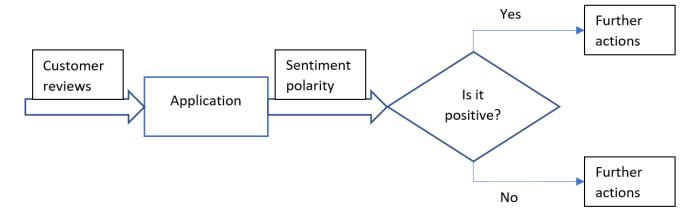
Opportunity

Companies need to understand what their customers are saying about their business and products. This will enable them to remain competitive by providing better offerings and making better business decisions. Better product offerings will boost sales and improve revenue. Trimming poor products and bad sellers will improve operational efficiency and improve business profitability. By understanding what the customers are thinking, the company will also be in a better position to frame long-term goals to grow sustainably and widen the competitive advantage.

Solution

In this project, we propose building an application to interpret the customer sentiments about the business and products from the product reviews real-time. The application will interpret whether the sentiment polarity in a review is positive or negative.

Flowchart



Application

Reviews with positive or negative sentiments are equally important. Reviews with positive sentiment will tell us what we are doing right and need to keep doing. Reviews with negative sentiment will tell us what needs to be improved. This intelligence can be used to adjust the price, visibility, and variety of offerings provided on the digital shelves.

More specifically, we would be able to understand:

- If the price is just right or higher than the market standard
- The quality of the products and/or services offered
- Whether the promotional efforts are attracting the customers
- If there are some products not being offered
- If better products are being offered by competitors
- If buyers feel there are fake reviews being written
- The sellers which cause a delay in shipment
- If products are received in broken/used condition
- Whether there are issues with the product; like software and OS compatibility issues
- If the customer is going to recommend the product/website to his friends/family
- If they wished some other accessories were also supplied with the product