

Understanding Consumer Perception for a Product

Gold Team 6, Section 1

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Abstract

Our project provides companies and businesses the ability to track what consumers are saying about their products and services, on Social Media. As a proof-of-concept, we took the new Apple iPhoneX as an example and worked with data from Twitter. We implemented our solution using AWS services and calculated the sentiment for tweets, identified what features people liked and disliked, and tried to find key influencers, that could be targeted by companies, to increase their reach on social media. Our analysis is presented on a dashboard made using Elasticsearch and Kibana.



Solution Architecture



Twitter - We tracked tweets related to the iPhoneX, from across the world



Kinesis - We used the Kinesis streaming service to obtain tweets and process them before storage



DynamoDB

DynamoDB - A NoSQL database - This was the primary data store, where we stored the data, after processing from Kinesis



Amazon Lambda

Lambda - We wrote custom python code, which is triggered every few minutes, and copies the data to a search engine



Elasticsearch, an open-source search engine - We indexed our processed data in ES, to make our data searchable in various ways



Kibana - Finally, we used Kibana to generate visualizations, and create a user-friendly dashboard

Future Scope & Applications



360 product overview - Build a holistic understanding of your products, by integrating social media with internal data



Competitive Analytics - Understand your competitors' strategy and engagement with user on social media



Key Influencers - Find people who are brand advocates and have a big following, to be potential brand ambassadors



Policy making - Gauge how the public reacts to important policy decisions