**INTRODUCTION**

With an ever increasing demand of smart phones, the mobile phone market is expanding at an exponential pace. With such a boom in the smart-phone industry, there is a need to realize the holistic review of the brand and the model of phone. There are numerous brands present in the market, out of which some are dominant and occupy quite a big part of the industry. For instance, Samsung, Apple, etc. are names associated with brands which are famous throughout the world. Electronic commerce plays a vital role in increasing the sales of the mobile phones and influencing consumer buying patterns. Reviews available on such e-commerce platforms act as a guiding tool for the consumers to make informed decisions. Retail websites like Amazon.com offer different options to the reviewers for writing their reviews. For instance, the consumer can provide numerical rating from 1 to 5 or write comments about the product.

As there are innumerable products manufactured by many different brands, so providing relevant reviews to the consumers is the need of hour. Number of reviews associated with a product or a brand is increasing at an alarming rate, which is no less than handling the big data. Classifying the reviews on the basis of sentiment of customers into positive and negative sentiment provides sentiment orientation of the review, hence results in better judgement. Segregation of reviews on the basis of their sentiment can help future buyers to evaluate positive and negative feedback constructively and reach at better decisions as per their requirements. This evaluation acts as a testimony to the users who are looking to know the details and specifications of the smartphones; thereby increasing user credibility

In this research, unstructured data of Mobile Phone Reviews have been extracted from Amazon.com. It has been filtered to remove noisy data and has been pre-processed to evaluate sentiment of the reviews using supervised learning. The reviews have been classified using machine learning classification models like Naïve Bayes, Support Vector Machine (SVM) and Decision Tree and have been cross validated to find the best classifier for this purpose.