## **ABSTRACT**

Smart phone selection based on customer preference is a fairly complicated problem usually customer voice is inconsistent, imperfect and vague. However, the customer voice about a product is same. A good product has positive image to the customer and the same for poor product. This research describes a technique to map the voice of customer about smart phone product based on case-based reasoning. The technique to model the case based reasoning is Fuzzy Associative Memory (FAM). First, FAM system is constructed subjectively based on historical data and then optimized using Genetic Algorithm (GA) to increase its accuracy. A set of data in a size of 42x16 is used for training while another data with the same size is used for testing. After optimization, the accuracy of the proposed FAM system is 90.48% when training and testing.

Keywords: Product Selection, Customer Preferences, Fuzzy Associative Memory (FAM),

Genetic Algorithm (GA)