Srinivas University

# Mangalore ‐ India

**Atomic Research Centre**

**Centre for Business Intelligence**



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1. **Purpose of ARC:**

Predicting the customer behaviour and understanding them to improve business is an important part in Business Intelligence. It is necessary to determine the customer needs and wants in framing market strategies. It focuses on the behavioural data analysis of the customers. The face recognition model extracts the emotion and other features of a customer. The required features will be extracted and will be further analysed to evaluate a person interested in buying the products or not. This helps to concentrate more on the interested customers thereby reduces manpower in guiding customers in any business.

## Objective of ARC:

* Improves business opportunities
* By using face automation technique, it is possible to select the interested customers

Number of customers can be increased by making purchase time minimum

* To identify the role of credentials like income-group, age-group in purchasing a product at the time of first visit to the online store.
* Evaluating the interest of the customer in buying the product with Face extraction and Feature extraction method.

## Description on Proposed Research:

Currently the members of the team are working on different research areas like Opinion Mining, Natural Language Processing by using Regression Analysis. The coordinator of the centre has developed Emotion Detection System for for the manual collected dataset with various age, profession categories using Regression techniques.

## Expected Outcome:

A business intelligence appraisal based on emotion detection using face recognition is proposed to implement in this model. When the customer visits first time to a store, the model captures the image and extracts the required behavioural features. These features will be linked with the existing behavioural features of the built model.

Final evaluation of business intelligence will be done by comparing the features. When similar matches available after comparison stage, then the products will be recommended to the new customer. This work helps business stores to identify individual purchasing power of a customer when he/she visits first time. With the help of this model, it is possible to analyse the customer willing towards buying a product.

## List of the Team Members:

Dr.Nethravathi P.S, Professor & Coordinator of Research Centre

Dr.P.S.Aithal, Research Professor, Advisor of Research Center

1. **List of Working Papers:**
2. Model of Feature Extraction
3. Predictive analysis on the basis of Emotion
4. **List of related Published Papers in Journals, Proceedings, Book Chapters, Magazines by this Group:**
5. Nethravathi P.S, Christi Spulbar,Ramona Birau, “Business intelligence appraisal based on customer behaviour profile by using hobby based opinion mining in India: a case study”,Economic Research – Ekonomska Istrazivanja, Routledge Publishers, Vol 33, Issue 1, pp 1889-1908.
6. Shu-Hslen Liao, Yu-Chun Chung, “The Effects of Psychological Factors on Online Consumer Behavior”, Graduate Institute of Management Sciences, Tamkang University, Taipei City, Taiwan, 2014
7. Khagendra Nath, Rachna Agrawal, “The Influence of Personality Traits on Consumer Impulsive Buying Behaviour”, International Journal of Marketing and Business Communication, Volume 5 Issue 1 January 2016.
8. Nethravathi P S & K.Karibasappa, “Augmentation of the Customer’s Profile Dataset using Genetic Algorithm”, International Journal of Research and Scientific Innovation, Volume IV, Issue VIS, June 2017.
9. Nethravathi P S & K.Karibasappa, “Business Intelligence Appraisal of Augmented Data based on Existing Customers’ Dataset Obtained by Genetic Algorithm Using Multiple Correlation Technique”, International Advanced Research Journal in Science, Engineering and Technology, Volume.4, Issue 7, July 2017.
10. Nethravathi P S & K.Karibasappa, “Business Intelligence Appraisal of the Customer Dataset Based on Weighted Correlation Index”, International Journal of Emerging Technology & Research, Volume 3, Issue 6, November 2016
11. Nethravathi P S & K.E.Prakash, “Customer Relationship Management System”, Journal of Emerging Technologies and Innovative Research, Volume 6, Issue 2, February 2019, pp 283-286, ISSN: 2349-5162

## Dr.Nethravathi P.S