# **Application of Image recognition in BFSI to improve Customer Service**

**Team Name**: MatchNow

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In the BFSI sector with increased competition the customers are becoming more price sensitive and less brand loyal. So competitiveness is significantly dependent on the bank’s ability to proactively satisfy their customer needs. We aim to develop an intelligent image recognition system as a tool for enhancing personalized customer relationship.

USE CASE: As the customer enters the bank branch, the security camera will capture the customer’s image and match it with the bank’s customer record in near real-time to identify the customer as NEW or EXISTING (pre tagged as Priority or General customer). Based on the result it will alert the designated relationship manager(RM) for each segment. Also all history/data of that particular customer will be fetched and displayed on screen of that RM.

Add-On feature: The image captured by the security camera will also be analyzed for identifying the real time sentiment of the customer, helping to engage with the customer efficiently.

This use case is designed to develop strong connections with customers by providing them with information directly suited to their needs and interests and by promoting faster and open communication. It *well suited for any services industry* where customer relationship is important. For example, application in restaurants, hotels and retail stores etc.

*Why not identifying customer using RFID or polling Mobile phone using beacon technology?*

The reason being with photo matching we can eliminate the dependency of identifying the customer from physical devices. The image recognition is one of the most reliable ways to identify the high priority customers.

Technologies to be used:

1. Image Recognition API
2. Emotion API
3. Tessel
4. Camera (IoT device)
5. AWS for web server (web service & database)

Implementation plan: There several open source APIs available in market. During the course of the project we will evaluate and identify the best APIs which will accurately detect the customer through facial recognition and also be able to predict the sentiment of the customer in real time.

(a) IBM Watson Visual Recognition API: <https://www.ibm.com/watson/developercloud/visual-recognition/api/v3/?node#introduction>

(b) Microsoft Cognition API: <https://www.microsoft.com/cognitive-services/en-us/face-api>

(c) Google Vision API: <https://cloud.google.com/vision/>

(d) Others open-source API: <https://www.quora.com/What-are-the-best-face-detection-APIs>

**WEBSERVER & DATABASE MANAGEMENT SYSTEM:** AWS

**CUSTOMER 360 DEGREE PROFILE:** GET Url from Web Server

Skill sets: Java, JavaScript, Web Services, Python, HTML, SQL