## **Competitive Analysis**

There several open source APIs available in market. We have evaluated and identified the Microsoft Cognition API for our use case as it best matches with our requirements of accurately detecting (upto 70%) the customer through facial recognition and also be able to predict the emotion of the customer in real time.

- (a) IBM Watson Visual Recognition API: <a href="https://www.ibm.com/watson/developercloud/visual-recognition/api/v3/?node#introduction">https://www.ibm.com/watson/developercloud/visual-recognition/api/v3/?node#introduction</a>
- (b) Microsoft Cognition API: <a href="https://www.microsoft.com/cognitive-services/en-us/face-api">https://www.microsoft.com/cognitive-services/en-us/face-api</a>
- (c) Google Vision API: <a href="https://cloud.google.com/vision/">https://cloud.google.com/vision/</a>

From the web search we came across several companies who have deployed products that are similar to what we propose, yet there are few underlying differentiations.

The following table lists the features that are included/not included in our solution.

	U.K. based firm	L.A. based jewelry boutique - Tarina Tarantino	Team MatchNow
Purpose	Using facial recognition for Law and security enforcement system	High end store using facial recognition to spot VIP customers	Tool providing facial recognition to identify existing customer and match services to customer preferences for restaurants
Value proposition	Reduction in crime rate through tracking	Increase in particular segment customer loyalty	Increase in customer experience and hence loyalty
Differentiation	More accurate/ advanced face matching. Also based on skin texture, hair etc. Works even when person is wearing eyeglasses. No emotion detection	Designed to recognize celebrity customers only. No emotion detection.	Face Match upto 70% accuracy. Predictive analytics to identify the all customer's history and emotions
Persona	Suspicious / peculiar behavioral customers	Celebrities	Young to middle aged frequently visiting customers
Audience	Law breakers / Suspects	VIP customers	Loyal customers who sign-up for face matching services