VIDYAROHA

Banker's Smart Assistant

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Who are your Customers ?

Identity

Detection

Verification

Authentication

Demographics

Age

Gender

Emotions

Sentiments

Attention

Facial Landmarks

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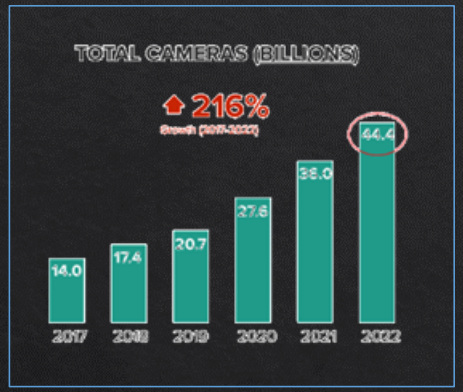
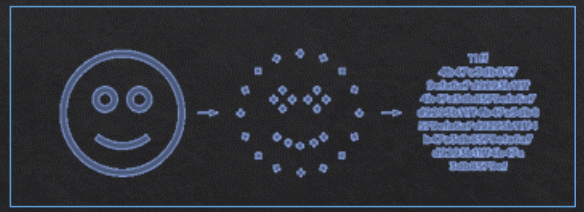
HOW IT WORKS



Input from camera



Recognition, Encryption & Analysis

We report to our customers:

Identity
Age
Gender
Ethnicity
Emotions
Location
Behaviour

We take care of your privacy
The images are encrypted to hash and can never be reverse engineered

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Vidyaroha Vs Enterprise Competitors

	Vidyaroha	Amazon	Google	Microsoft	IBM Watson	Face++
Face Detection	✓	✓	✓	✓	✓	✓
Face Recognition (Image)	✓	✓	✗	✓	✗	✓
Face Recognition (Video)	✓	✗	✗	✗	✗	✓
Emotional Depth (%)	✓	✗	✗	✓	✗	✗
Emotions Present (Y/N)	✓	✓	✓	✓	✗	✓
Age & Gender	✓	✓	✗	✓	✓	✓
Multi-face Tracking	✓	✓	✓	✓	✓	✓
SDK (Offline)	✓	✗	✗	✗	✗	✓
API (Cloud)	✓	✓	✓	✓	✓	✓

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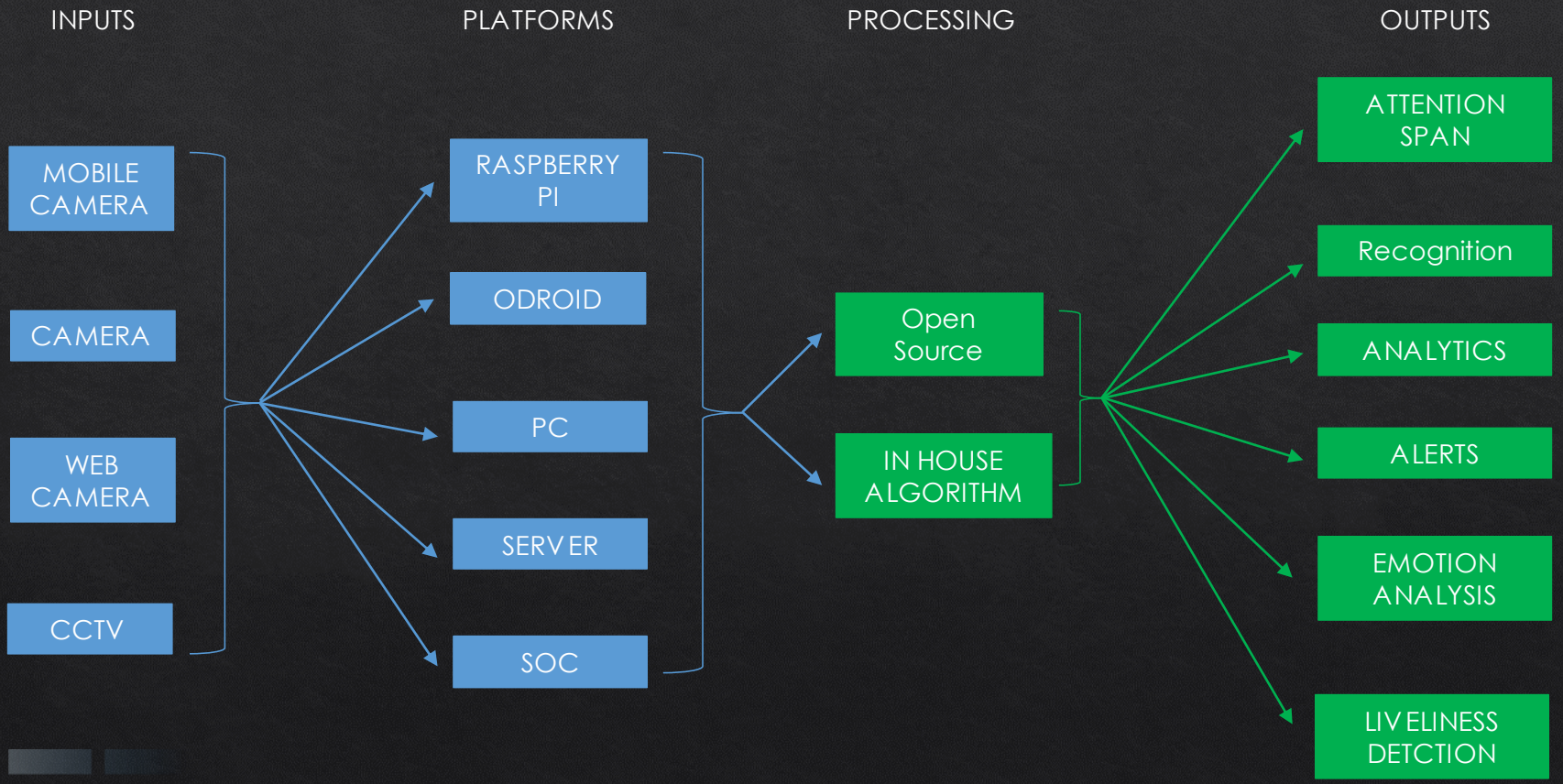
WE ARE NOW WITH



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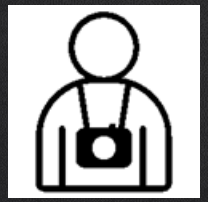
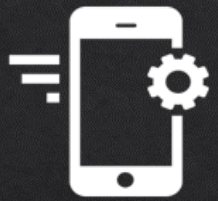
Process For App Testing



Enrollment of Users



App Installation on Phone

Capture Image & Upload

Recognition With confidence score

The Process is to be followed just for testing of App and Authenticity.
Business Application would be different

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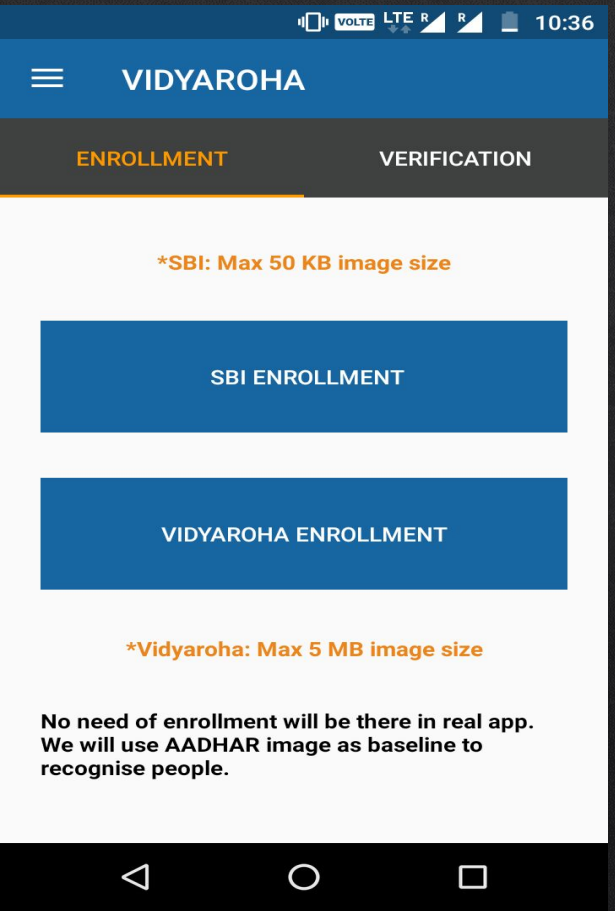
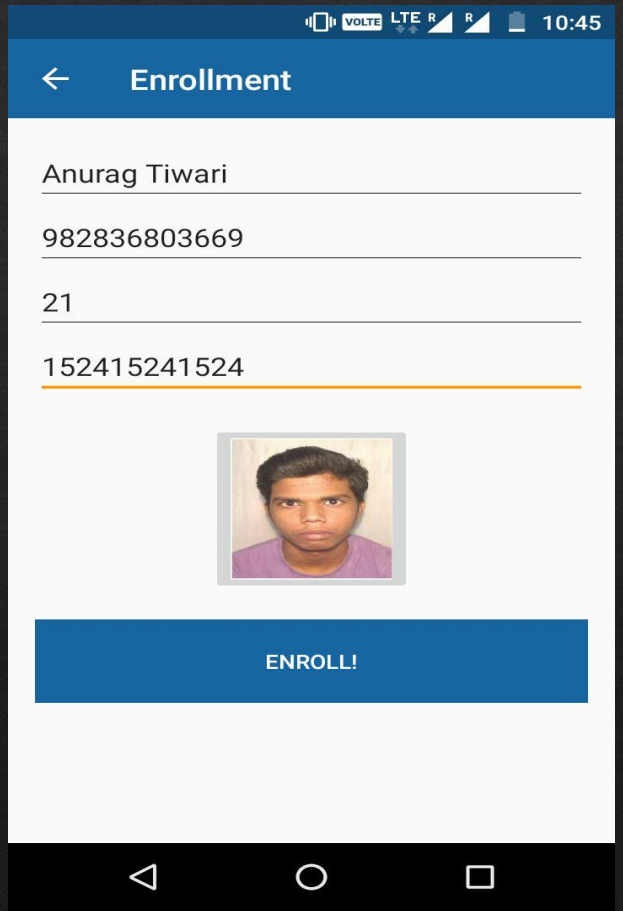
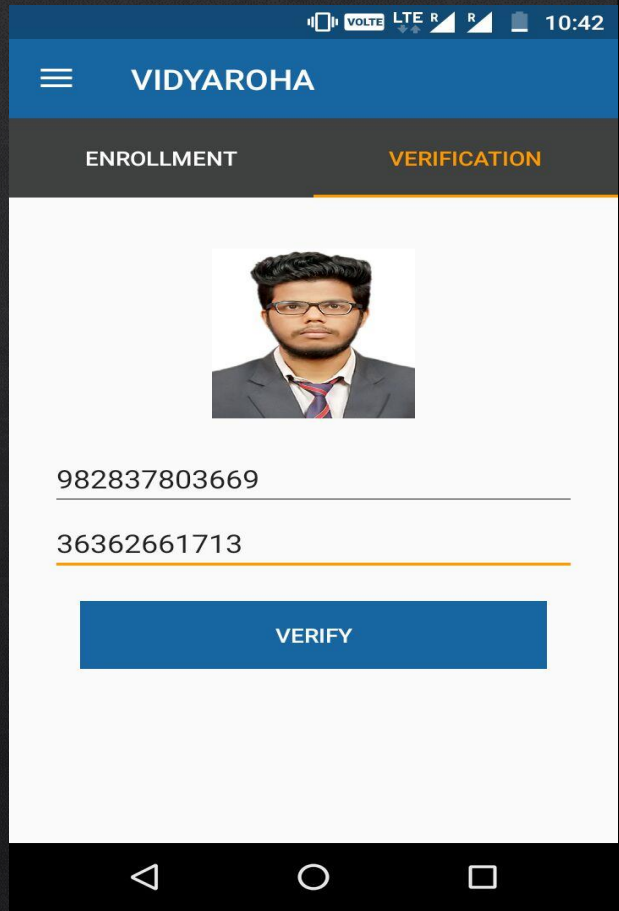
Test App For Checking Authenticity Using AADHAR Image

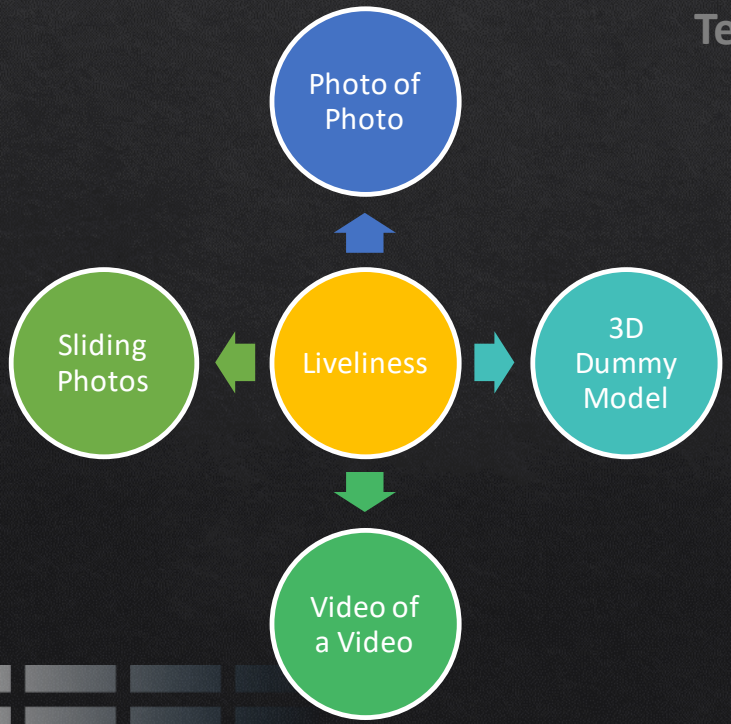






TEST CASES FOR LIVELINESS

10 users,
60+ Videos,
Tested on Child, Adult
Male , Female



True Positives	False Positives
40	0

False Negatives	True Negatives
3	10

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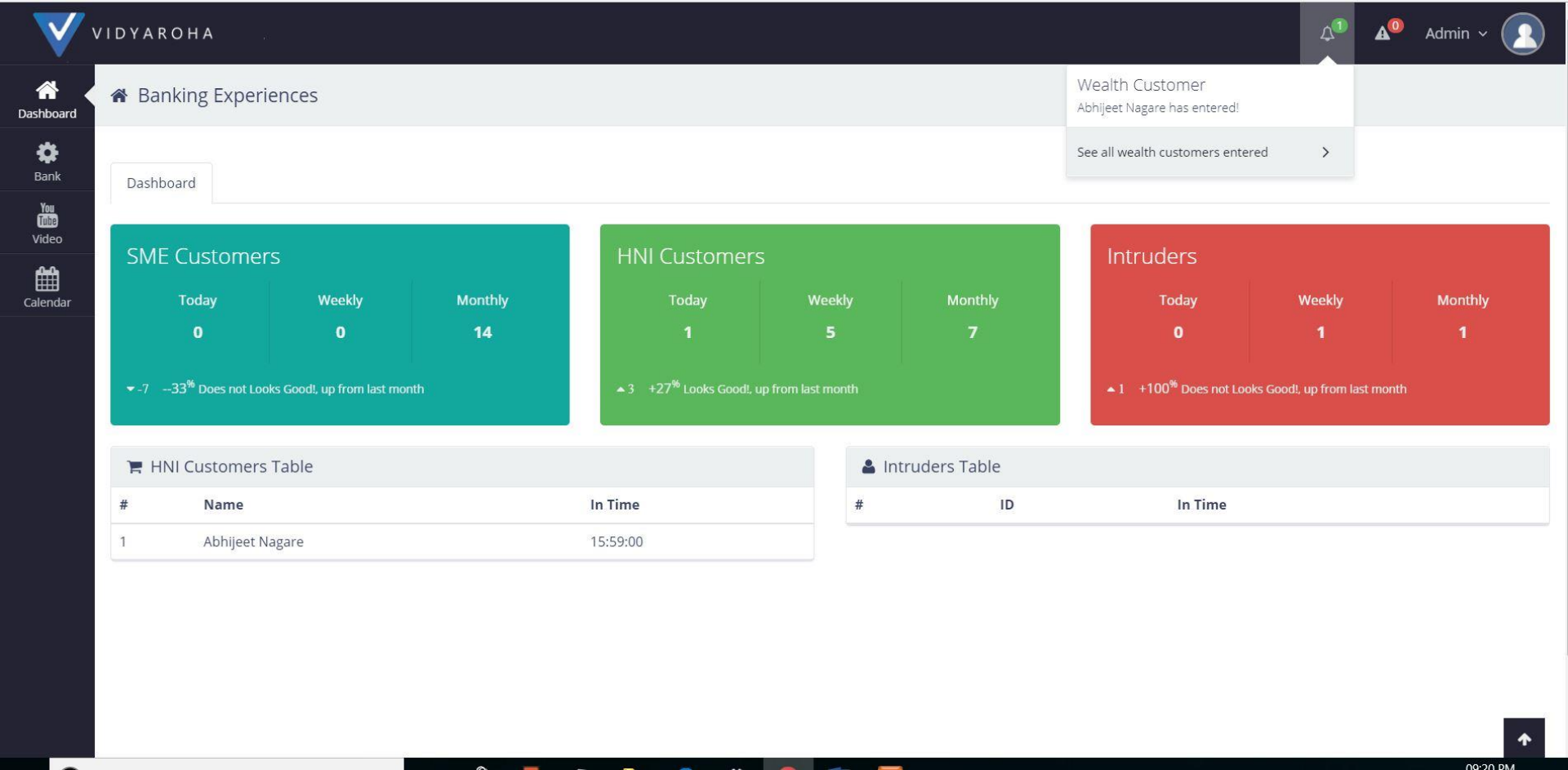
Dashboard for Real Time Customer Management



Map Customer Journey inside the bank and assign right concierge to right customer in real time and context of customer history

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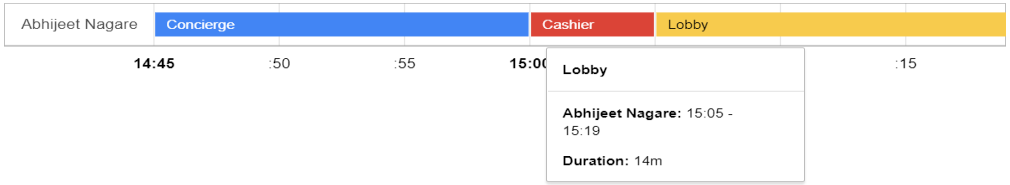
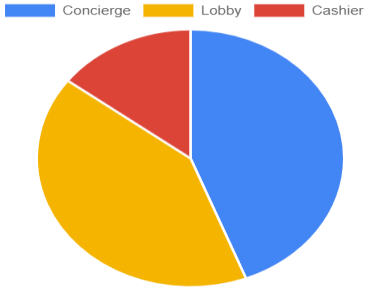
Admin

Dashboard
Bank
Video
Calendar

Weekly Wealth Customers Insights

Time Spent at various touchpoints by Customers in a Bank





Excel Print

Search

#	Name	Date	Concierge	Lobby	Cashier	Duration
1	Abhijeet Nagare	2018-03-13	15 Minutes.	14 Minutes.	5 Minutes.	34 Minutes.
2	Akash Neve	2018-03-13	19 Minutes.	5 Minutes.	6 Minutes.	30 Minutes.
3	Rahul Pagare	2018-03-13	4 Minutes.	4 Minutes.	2 Minutes.	10 Minutes.
4	Abhijeet Kulkarni	2018-03-14	28 Minutes.	0 Minutes.	0 Minutes.	28 Minutes.

Analyse The Banks Inside Section Usage in Real Time and issue time slot to upcoming customers and manage workflow

Bank
Video
Calendar

Today | Weekly | Monthly

February

Concierge

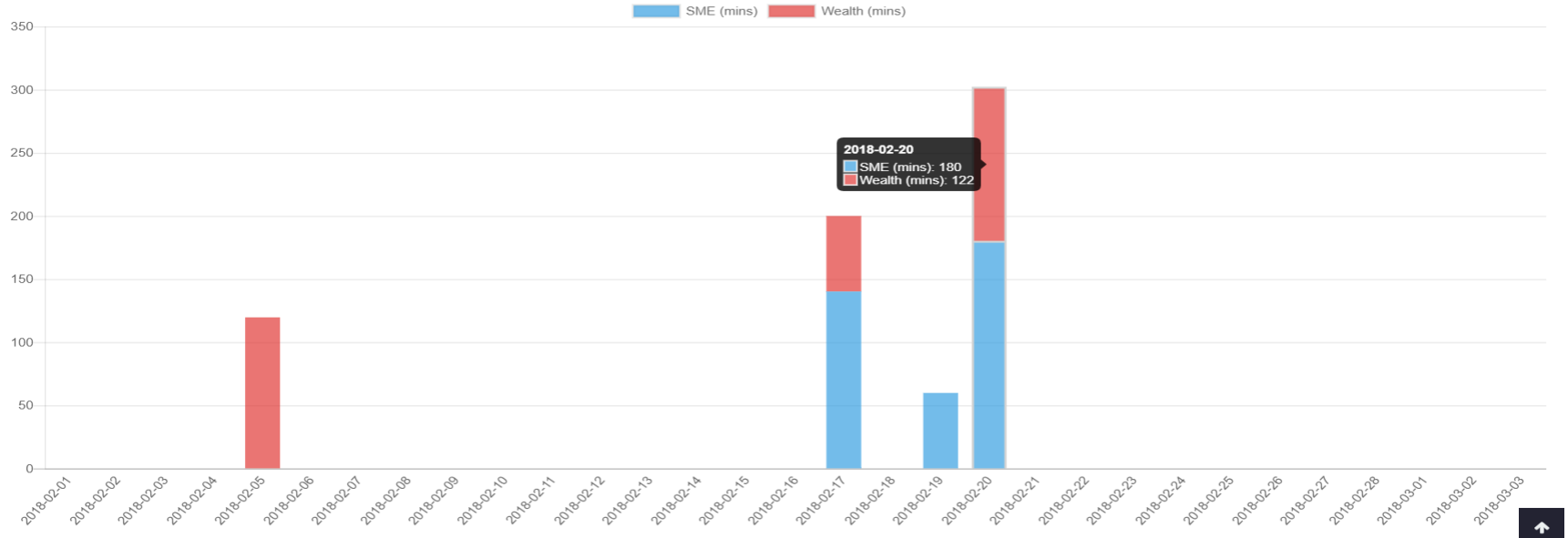
SME	Wealth
4	4

Lobby

SME	Wealth
2	0

Cashier

SME	Wealth
1	0



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What if a Bank gets to know customer sentiments in REAL TIME?

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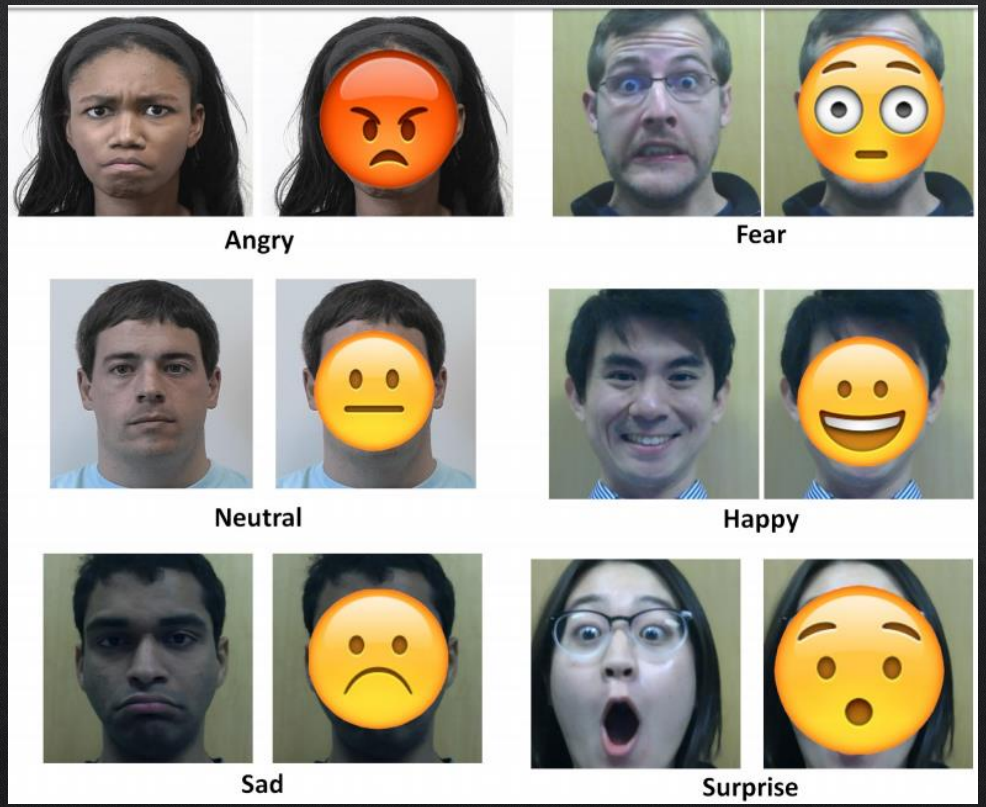
Emotion Recognition



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neutral
man
happy
man
neutral
man
happy
man
neutral
woman
happy
woman
sad
man
happy
man
neutral
man
happy
man
neutral
woman
happy
woman

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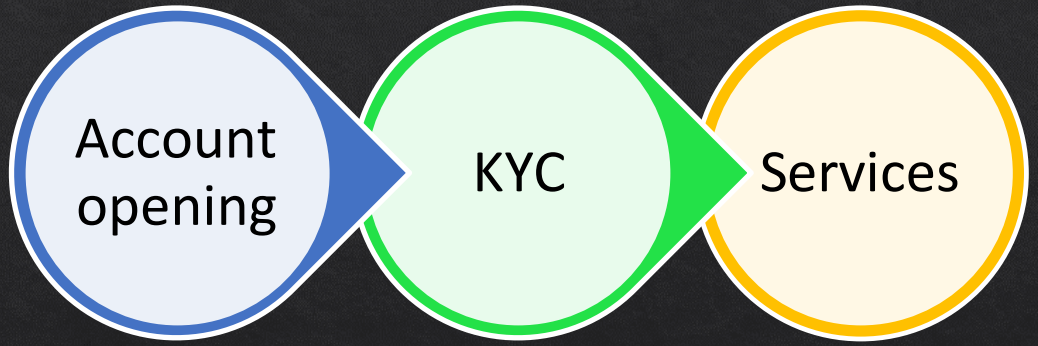
Banking aspects



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Account Opening

Current Procedure

- Manual form filling and data entry
- Manual verification of KYC
- Long procedure
- Needs customers to waiting

What we can do

- Kiosk based self service
- Spot online verification of KYC
- Capturing Biometrics and face for authentication
- Cross selling opportunities

Advantages

- Self servicing facilities
- Contactless banking
- Fool proof authentication
- On spot and self submission and approval of KYC
- Integrated product services
- No manual intervention of bank's staff
- Less time consuming

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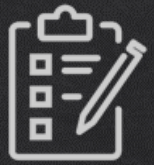
KYC

Current Procedure



- Manual process
- Requires users physical process
- Regulations and compliances keep changing

What we can do

- Mobile app based solution
- Enhanced customer experience
- Can keep up with the changing regulations and compliances
- No need of field agents

Advantages

- Fool proof authentication
- On spot and self submission and approval of KYC
- No manual intervention required
- Less time consuming
- No need for customer's physical presence

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Operations

- Presence of staff can be managed with out any additional infrastructure
- Talent management and register process can be automated and centrally monitored
- Work force management
- Field agents can be tracked

Instant HNI Customer identification

Intelligent Digital Signage

Customer emotion analysis

In-Bank Analytics

Ban Intruders

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OUR CUSTOMERS

TATA STRIVE | Right Skills Bright Future

नाशिक महानगरपालिका सर्वे भवन्तु सुखिनः

Sapat SINCE 1897

RECOGNITIONS

#startupindia

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Technology stats

No.of Images processed till date: 100,000+
No.of individuals enrolled into the system: 10000+
System operation time: 12+months
Overall Accuracy achieved: 99.38%
Liveliness: 10 users, 60+ Videos, 0 False Positives, 5 False Negatives

Faces in Input Image	Baseline Images to be comapred	Base Line Image Type	Faces Recognised	Confindence Score	Image Size	Image Source	Processing Time
1	1	AADHAR	1	65	18KB	Photo	1.8sec
1	1	AADHAR	1	58	13KB	Photo	1.3sec
1	1	AADHAR	1	61	35KB	Video	1.2sec
1	1	AADHAR	1	67	57KB	Photo	1.6sec
1	1	Phone Pic	1	82	210KB	Video	1.2sec
1	1	Phone Pic	1	91	205KB	Video	1.7sec
8	200 (40x5poses)	Phone Pic	8	72	200KB	Photo	6.4 sec
8	200 (40x5poses)	Phone Pic	6	67	210KB	Photo	6.1 sec
8	200 (40x5poses)	Phone Pic	7	68	212KB	Photo	6.3 sec
1	200 (40x5poses)	Phone Pic	1	84	40KB	Photo	1 sec
2	200 (40x5poses)	Phone Pic	2	73	42KB	Photo	1.2 sec
8	200 (40x5poses)	Phone Pic	8	69	214KB	Photo	6.47 sec
8	200 (40x5poses)	Phone Pic	8	71	215KB	Photo	6.38 sec

Note: 40 x 5 (5 poses) IMAGES => 40 students having 5 poses each

** These test cases are performed on a local machine having a higher configuration than virtual server (At this point of time we could not afford to purchase a

** For multiple faces in a image given as input we compared it with 200 images present on server. These images have baseline images of 40 students, each

** For single image testing we enrolled one aadhar image as baseline image. For verification any new image is passed and compared with particular aadhar image

** Benchmarked against the availbale facerecognition systems in market like Amazon Rekognition, Kairos, face++

** In live feed from video we enrolled aadhar images in one folder of diffferent people with name. Then whenver any face comes in frame of webcame it is compared with all the image and result is shown in real time with a box and name on frame with a welcoming sound

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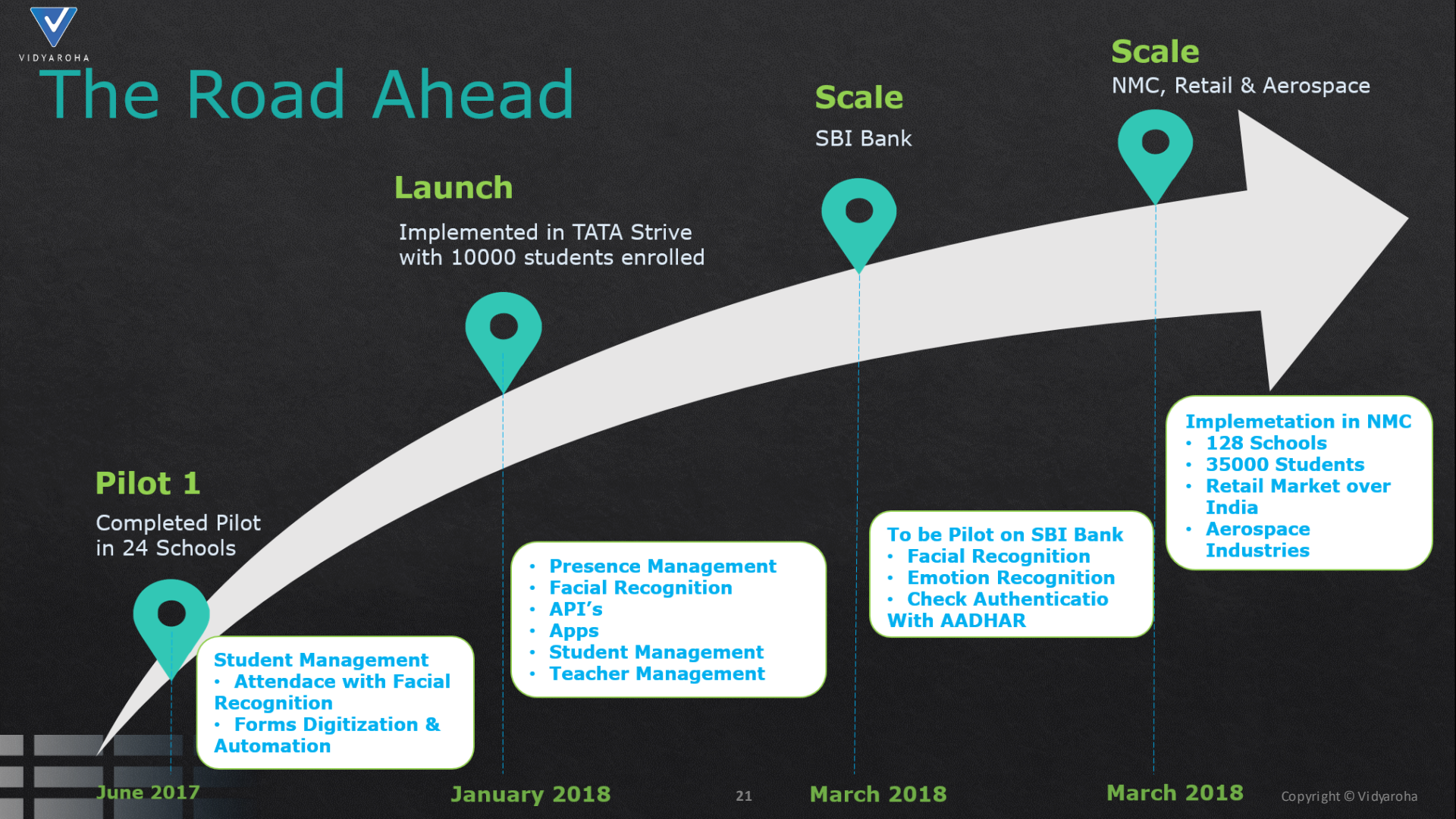
The Road Ahead



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Engagement

1. Our Team will make sure of giving the delivery of the product within the given timelines.

2. Risk of any harms or failures in the products made by us will be taken by us.

3. We do not store any images and processed images can not be reverse engineered so there will be no issues of privacy.

4. A continuous offline and online presence will be there of the team in case of any kind of engagement required.

5. We can provide the processing server and api's or app for the implementation whenever required.

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Vidyaroha is not Data Provider It Is Value Provider

We are Here to make an Impact Aren’t You ?

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