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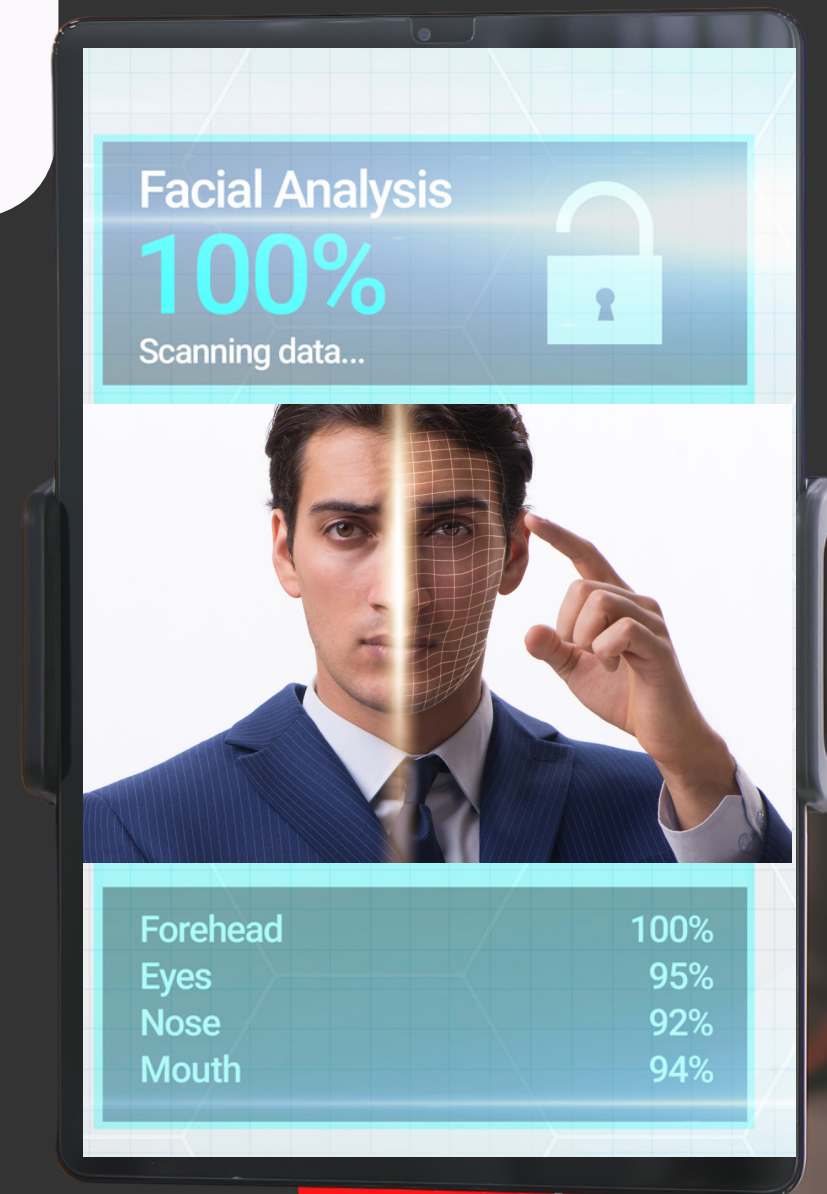
Jewellery Job Floor Safety

Jewellery Brand

# Asset Tracing & e-KYC

High End Jewellery  
Tracing

- | Increase Material movement Safety.
- | Automate Job order Verification.
- | Track People movement across Floors.



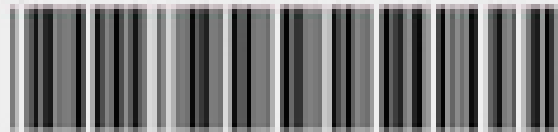



## The Intro

A Jewellery company in Surat creates pieces of fine Gold and Diamond jewellery for exports. A workforce of 120+ goldsmiths operate across the value chain with-in the jewellery factory. Goldsmiths and workers are involved in Weighing raw gold, Cutting, Mold & Casting, Setting diamonds, Finishing, Polishing, Marking, Packaging and Certification. All to create the final high-valuable jewellery product.

This process is dependent on highly skilled and trust worthy work-force.

Scaling the business and to hire more skilled workers acts as a constraint and increases the probability of gold and gems theft.

 JO-000059	Customer name: New England Jewellers Inc.																				
Order date: Mon 09-28-2015	Barcode for easy job tracking																				
Due date: Wed 11-04-2015																					
Customer contact name:																					
Customer contact:																					
Memo:  Add important memos	Attached job picture																				
<table border="1"> <thead> <tr> <th>Pcs</th> <th>Item</th> <th>Notes</th> <th>Weight</th> <th>M.U.</th> </tr> </thead> <tbody> <tr> <td>1</td> <td>CR001Y</td> <td></td> <td>0.00</td> <td>pcs</td> </tr> <tr> <td>6</td> <td>18K Yellow</td> <td></td> <td>1.00</td> <td>g</td> </tr> <tr> <td>125</td> <td>0.01 CT</td> <td></td> <td>1.00</td> <td>pcs</td> </tr> </tbody> </table>		Pcs	Item	Notes	Weight	M.U.	1	CR001Y		0.00	pcs	6	18K Yellow		1.00	g	125	0.01 CT		1.00	pcs
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# The Challenge:

## Access & Tracking

Globally Jewellery theft has doubled in the past 5 years, with average jewellery store theft amounting to 27,000 USD. More than 15% of the thefts are jewellery sneak by Internal employees.

To scale the business and to minimize risk of jewellery theft during its movement the company wanted a quick one time verification process using Aadhaar for new workers apart from its existing offline verification process.

It also wanted to secure verification and track jewellery access and movement of raw inventory for creating fine jewellery pieces across the value chain. Video based surveillance already exists. Company seeks automated inventory handling and movement of goods through person tracking, document work-order verification before raw material possession and movement from the vault to different dept spread across factory floors.

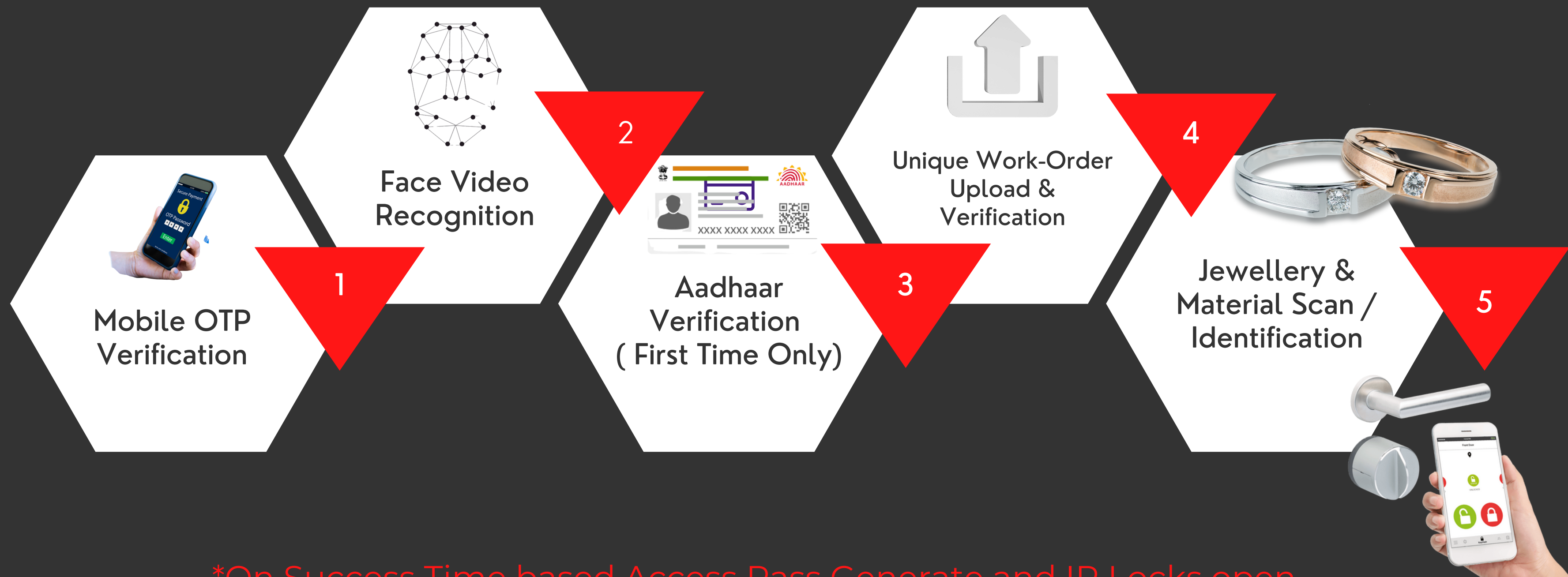
**IMPROVE**

**ACCESS & MATERIAL SAFETY**

**REDUCE**

**JOB ORDER DOCUMENTATION**

# Solution: **Factory e-KYC & Work-order Verification**



\*On Success Time based Access Pass Generate and IP Locks open

# Solution: **Factory Access**

## Shop Floor Access:

- Employees checks-in using Mobile App OTP on success,
- On Prem Face Scan server validates the Worker through Video.
- For First Time Entry -Addtnl Aadhaar scan Validation is done.
- User location is checked via Floor WiFi and location access is verified.

## Movement of Goods:

- Worker is requested to Scan the copy of the Printed Job Order with Unique Id. (NLP based scan is performed for NER Validation)
- Each Jewellery material to be moved its Bar-code is scanned via app.
- Job order and Material match is performed and verified.
- Each Job Floor has Access based IP Controlled Locks an expiry based Area Token is provided for Floor access which can be used to access the Wireless enabled locks.
- Facial Recog Model was trained for Face Scan.
- NLP based Ai Model was trained for Job Order scan and detection.
- Jewellery scan - object detection model was trained using Computer Vision and Deep Nets.

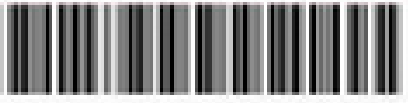

\*\* Locks were pre-ordered by the factory.

Tech Stack

## BUILT FOR SCALE

- Face Recognition Ai Server.
- Job Order Ai Model.
- Jewellery n Material Detection CNN Model.
- Meterial and People Movement Server.
- IDP Server.
- SMS Integration.
- Messaging service.
- Flutter App.
- Mongo DB.

Time to Rollout - 12 weeks

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Order date: Mon 09-28-2015	 Attached job picture
Due date: Wed 11-04-2015	
Customer contact name: [Redacted]	
Customer contact: [Redacted]	
Memo: Add important memos	

Pcs	Item	Notes	Weight	M.U.
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# Feature **Delight**

The Material Tracing Floor by Floor and e-KYC allowed the brand to scale its production safely.



01

## Face SCAN

Allow scan as floor check-in and attendance.



02

## Job Order Data Extraction & Validation

Job Order scan verified the material movement and compared it against the material movement.



# Awesome CSAT Score

Score Range : A+ to D

Client is provided with complete transition, deployment and handover.

## CUSTOMER Featured Point

Face Scan & Job Order document automation for material movement.

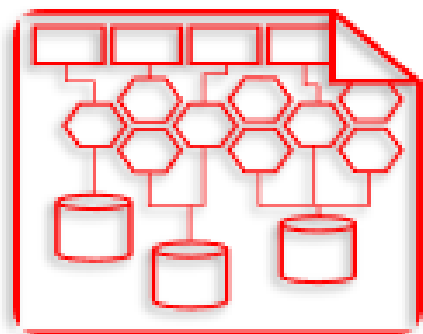
**A+**  
Compliance and Face Recognition.

**A+**  
Material Tracking.

**A**  
User Experience

**A**  
After Deployment Support.

# SERVICES STACK



## ENTERPRISE SaaS DEVELOPMENT

Enterprise SaaS Dev  
Web & Mobile Apps  
Agile & DevOPS  
Microservices  
Edge, Cloud & On-Prem  
Secure Dev ( SDLC )



## AI-ML, COMPUTER VISION

Customized Models  
Edge or Cloud  
Scaled Solution  
Real Time Compute  
Small Data ML



## NLP & VOICE AS A SERVICE

Customized Bots  
Text, Voice Bots  
Knowledge Streams  
FAQ & Query Engines  
Ontology & Graphs  
OCR & Summarization

**More Customer Stories !**

EMVOKE TECHNOLOGIES PVT. LTD

## CONTACT

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