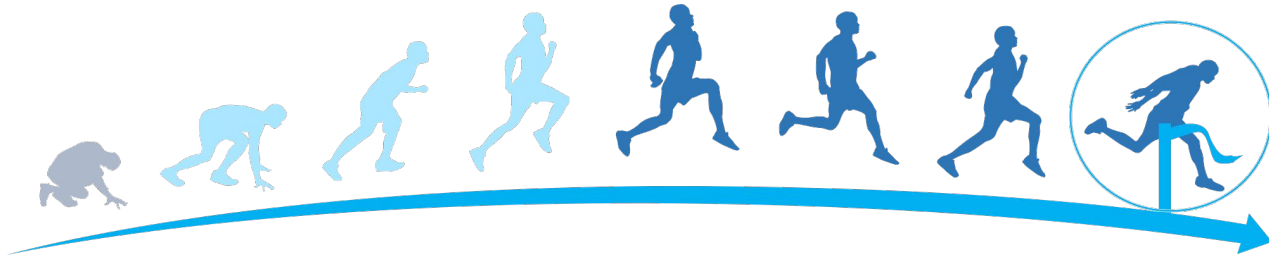


SKILLCATE

CV-based Customer Profiling Model

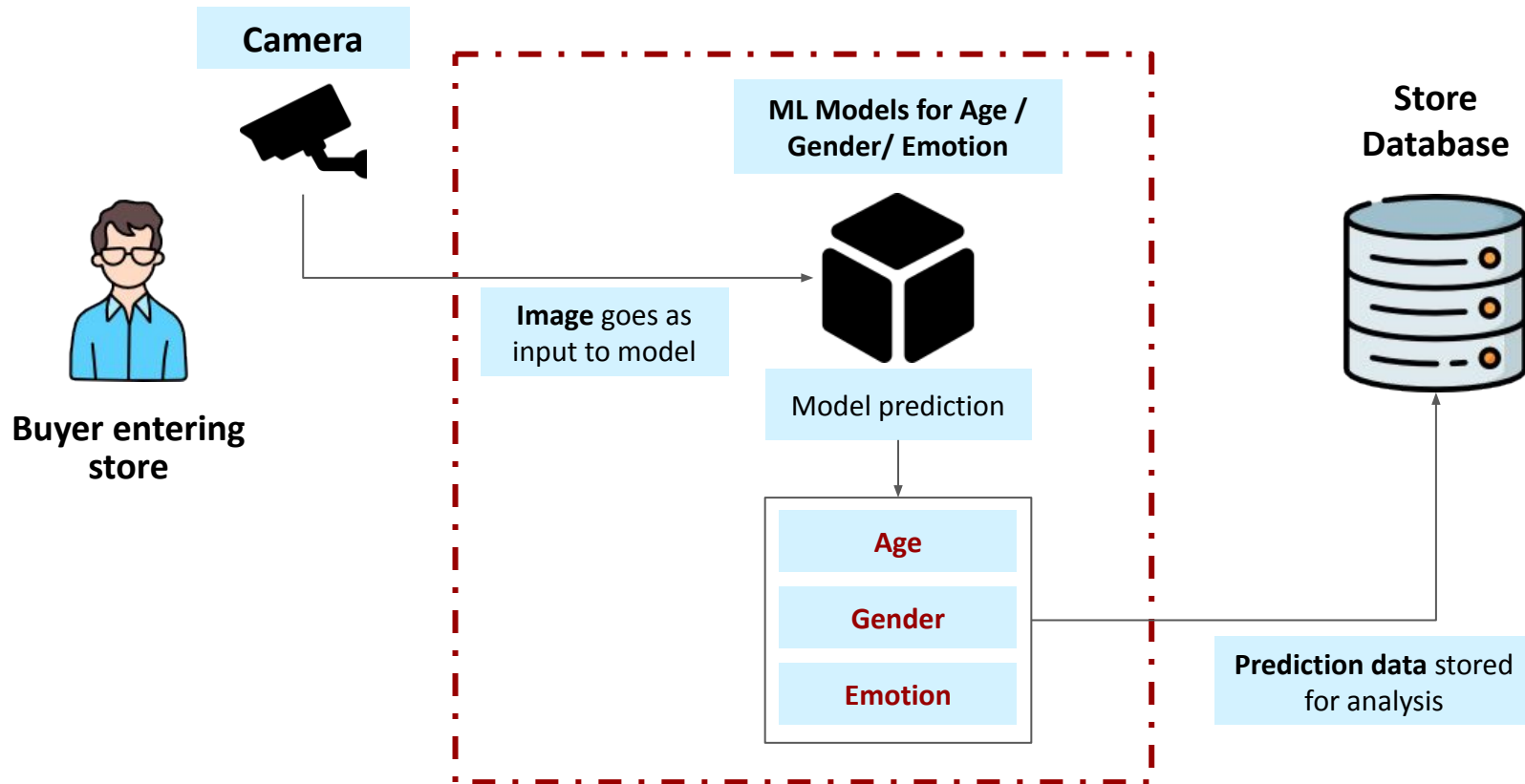
Final Delivery Presentation



Our deliverables to ABC Supermarket

1. Computer Vision based Customer Profiling Mode, that:
 - a. Accurately predicts Age, Gender & Emotion of people walking into the store
2. SKILLCATE's Scope of Work:
 - a. Training CNN Models on age, gender & emotion

Solution architecture for Customer Profiling Model



Our approach



- **Datasets used:**

- Facial-age & UTKFace for Age Detection
- UTK Faces for Gender Detection
- CT+ for Emotion Detection



- **Trained Deep Learning CNN Models, for detecting:**

- Age as: '1-2', '3-9', '10-20', '21-27', '28-45', '46-65', '66-116'
- Gender as: 'male', 'female'
- Emotion as: 'positive', 'negative', 'neutral'

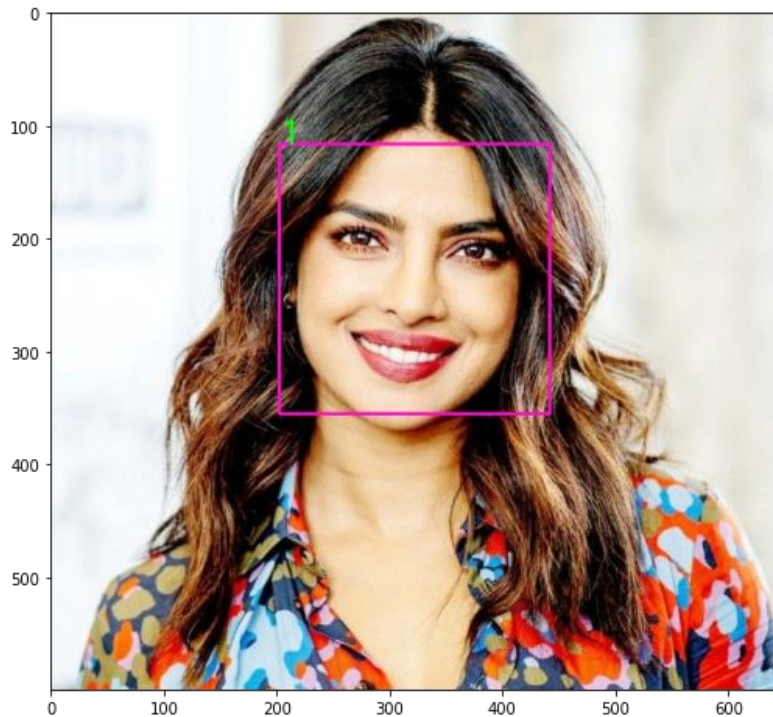
Deliverable 1: CV-based Customer Profiling Model

Model accuracies achieved



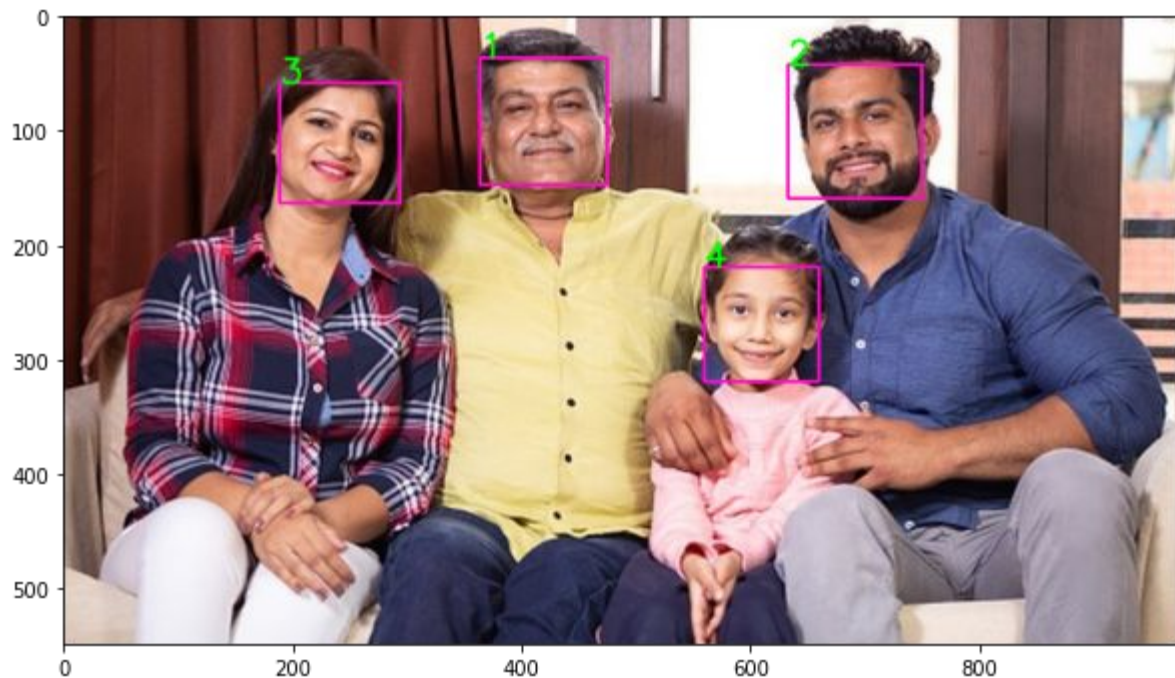
Age : 82.5 %
Gender : 89.5 %
Emotion : 97.2 %

Exhibit 1: Predictions on a single portrait



1: female, 28-45, positive

Exhibit 2: Predictions on a group of people

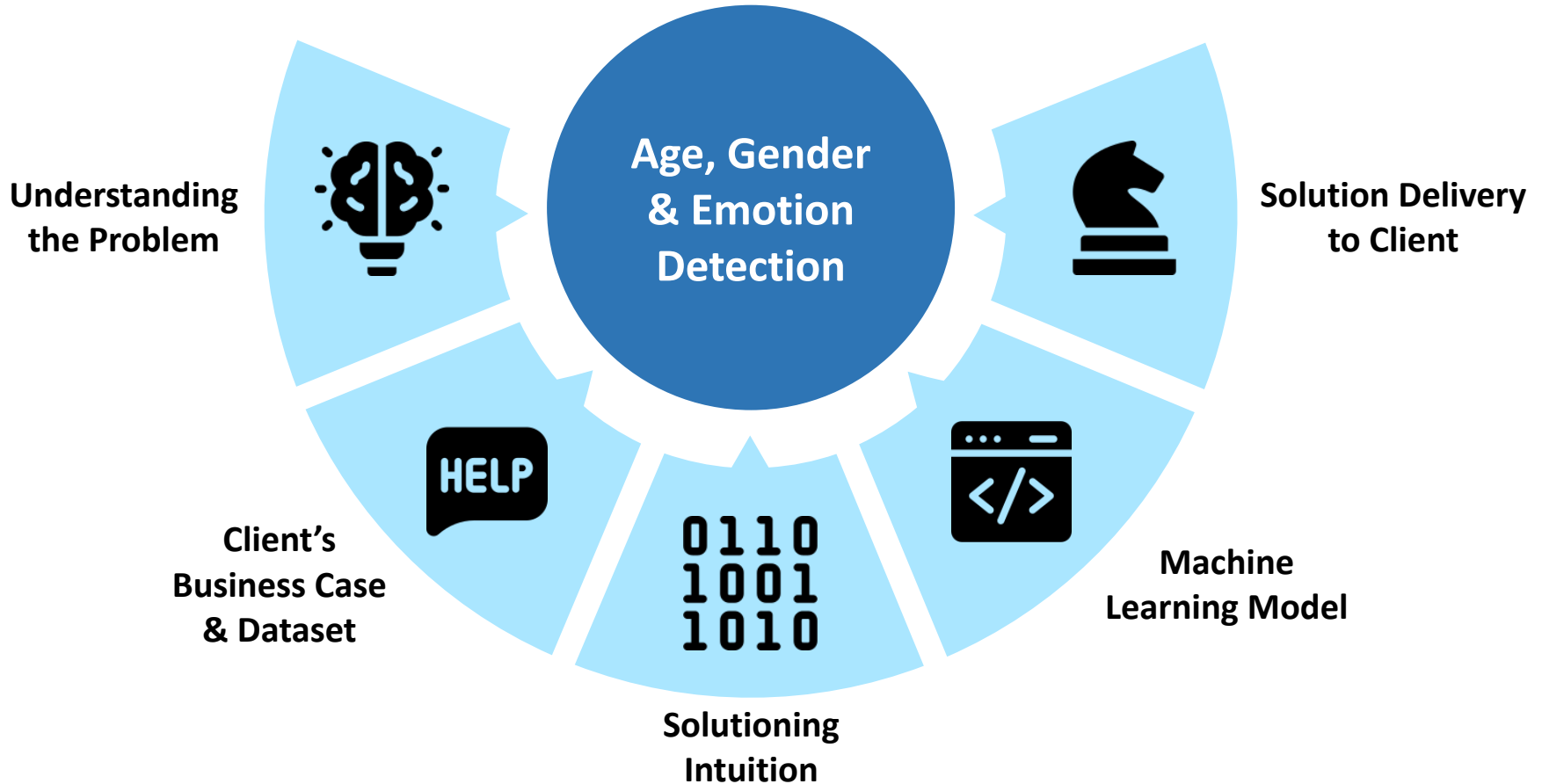


- 1: male, 46-65, positive
- 2: male, 28-45, positive
- 3: female, 28-45, positive
- 4: female, 10-20, positive

Next steps

1. As an additional scope of work:
 - a. We want to liaison with ABC Supermarket's hardware partner to get the CV-based Customer Profiling Solution Implemented
 - b. Sign a medium-term contract with ABC Supermarket to fully own data-driven improvements in Stores to:
 - i. Improve Conversion Rates & ATVs in a target based manner
 - ii. Further better Customer Profiling Models' accuracies

SKILLCATE



SKILLCATE

