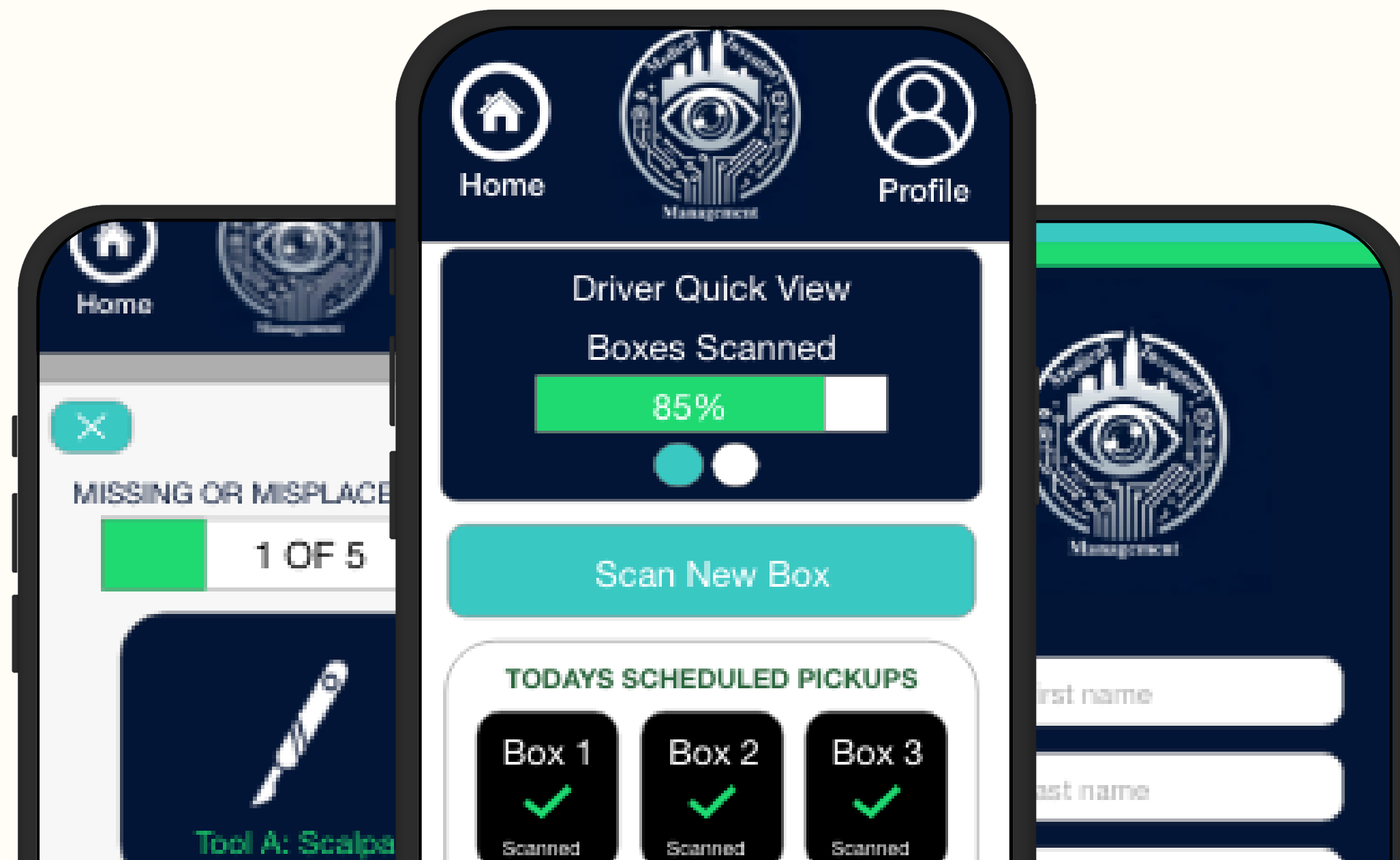
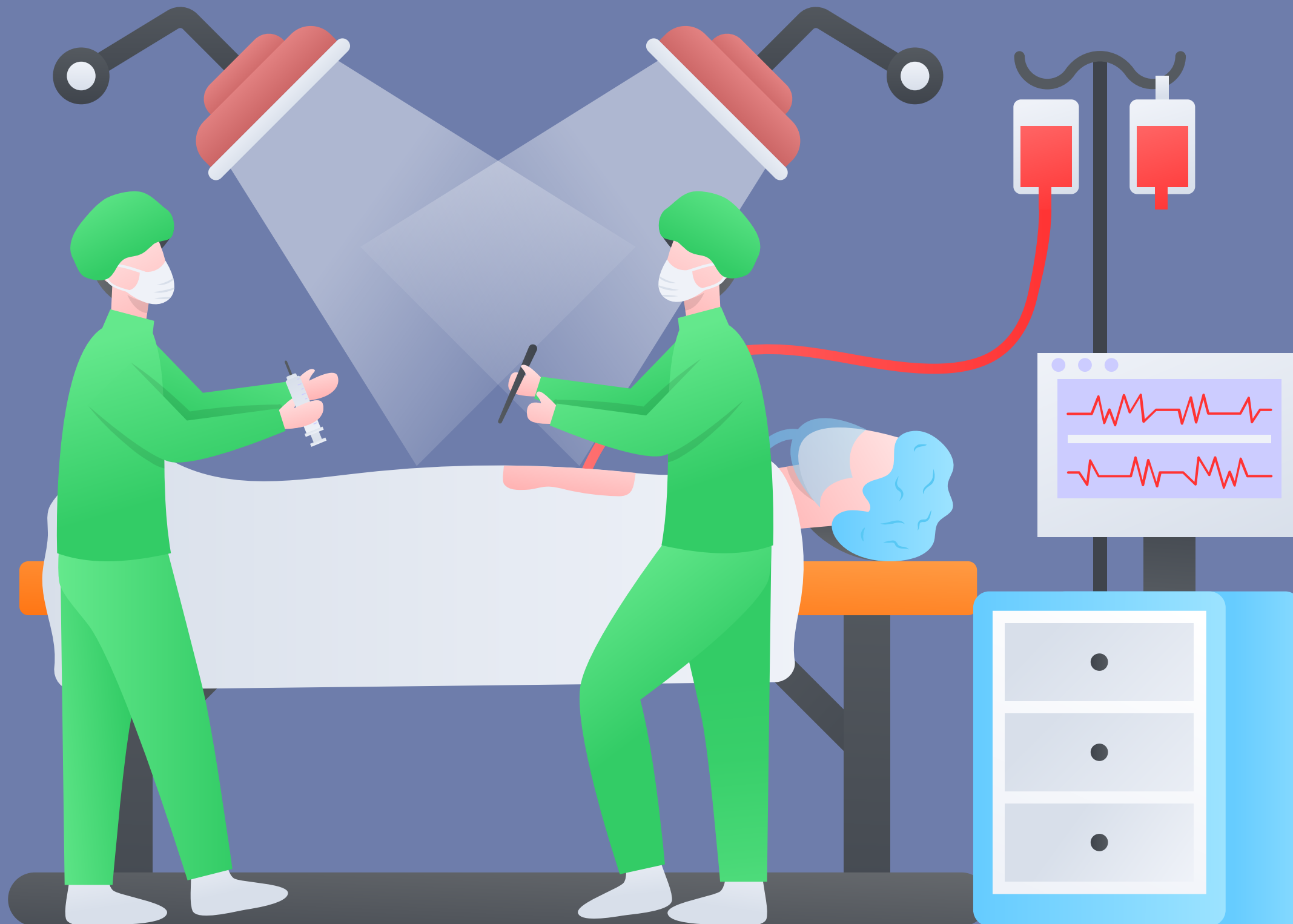


# Medical Inventory Management

**AN AI SOLUTION FOR SURGICAL INSTRUMENT LOSS**





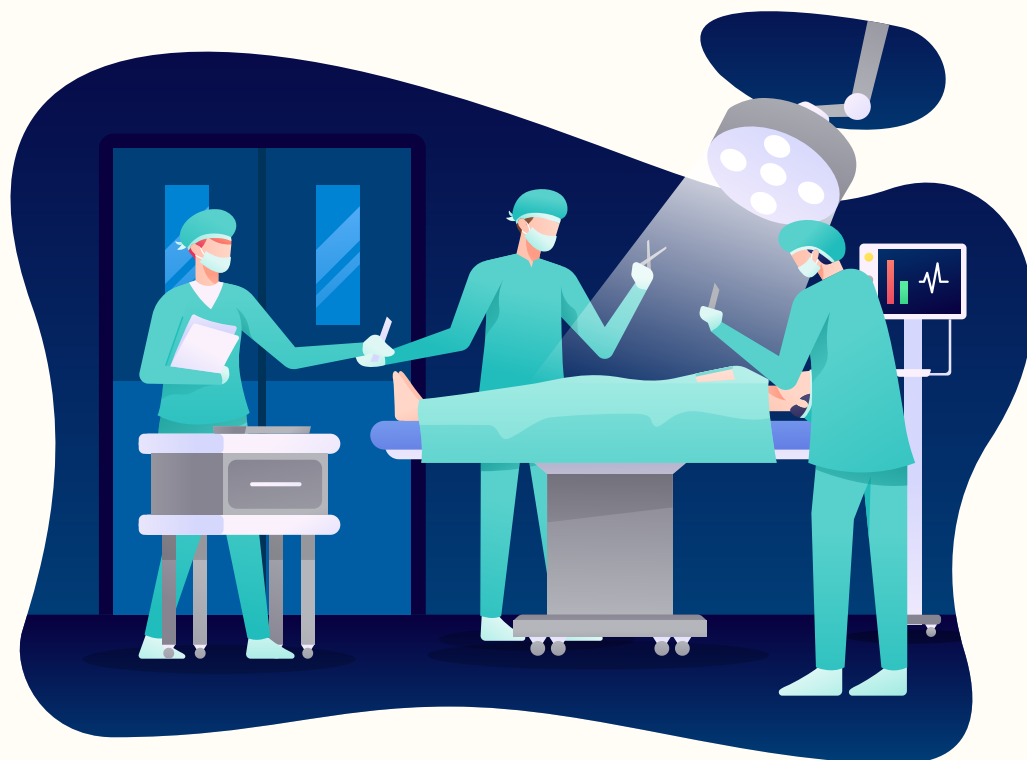
## Disclaimer

The information contained in this document is confidential, privileged, and only for the intended recipient and may not be used, published, or redistributed without the prior written consent of Medical Inventory Management.

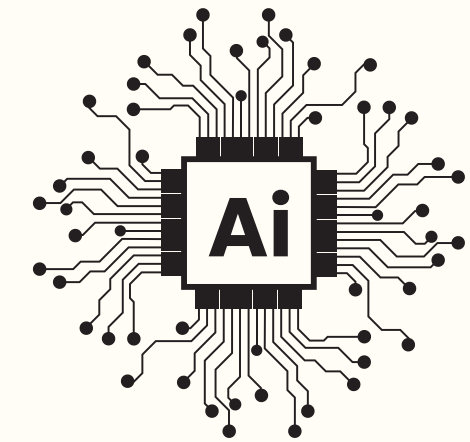
**NEXT** ➔

## OUR VISION

Our medical inventory management product prevents the loss of medical equipment prevalent within the Central Sterilization Unit – Operating Room – 3rd party provider pipeline.



## OUR PRODUCT



AI/Machine Learning coupled with computer vision mitigates pipeline PAIN POINTS and saves thousands of dollars of medical equipment from going missing



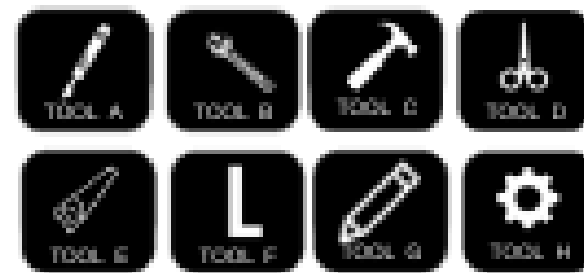
# PROBLEMS

Third parties are required to have complete (sometimes custom) tool sets in the Hospital's CSU ~24-48 hours before each surgery.



Whether it's lack of training, tool labels, or employees' drive, drivers employed by these tool reps are unable to ensure that tool sets are complete upon receipt from the CSU.

## EXPECTED TOOLS



## MISSING OR MISPLACED TOOLS



3rd Party tool reps are required to both keep track of inventory and be present in the OR during surgery

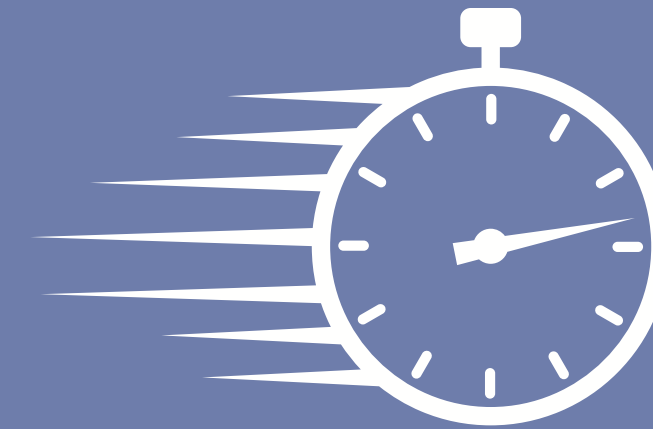


Lost tools cost tool suppliers and hospitals millions of dollars every year



# The Process

Post Surgery, medical tool cases go to the hospital's Central Sterilization Unit (CSU) for cleaning, the tools are washed, sorted and placed on surgical trays, placed in autoclaves for final sterilization and then boxed for drivers



The entire process  
takes 3 hours

## Step by Step

MEDICAL STARTUP

### 1. Initial wash



### 2. Tool sorting and placement into respective surgical

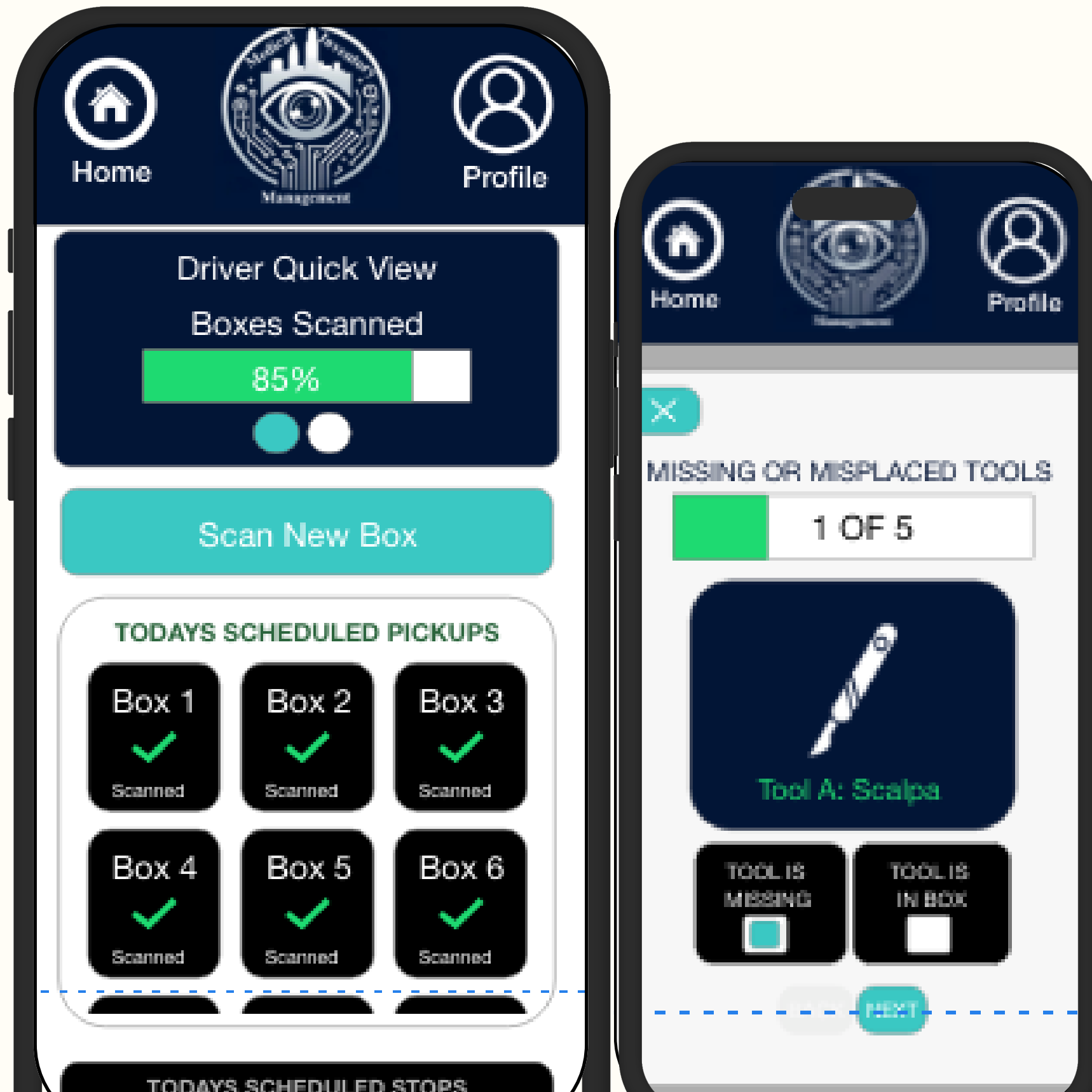


### 3. Baking in the Autoclave



### 4. Driver pickup

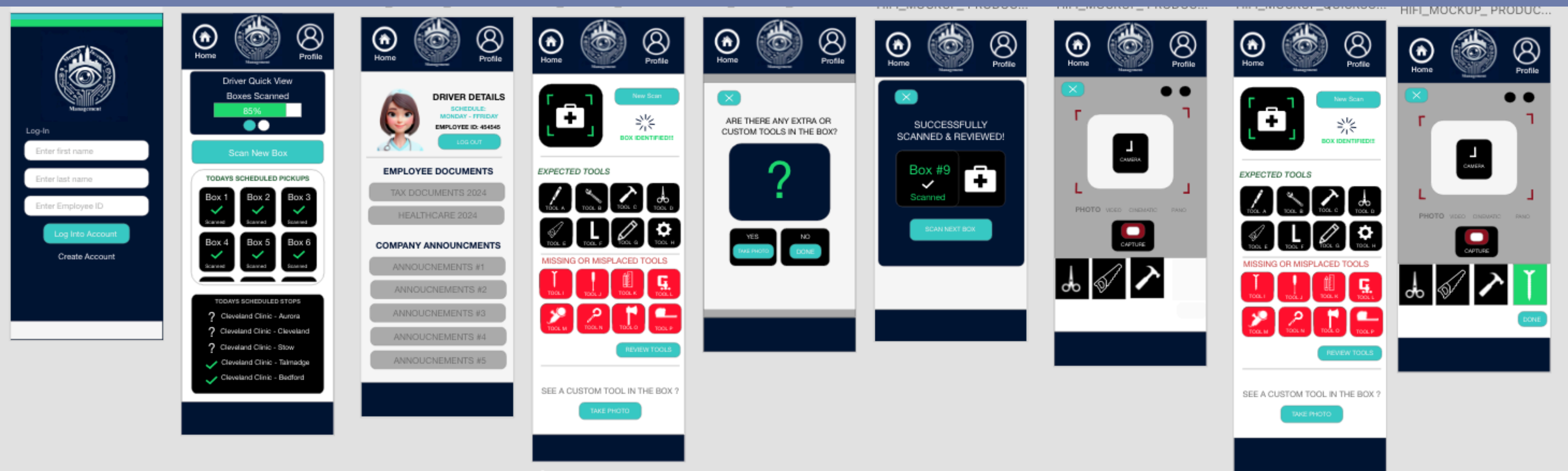




# OUR SOLUTION

- Our mobile app can detect missing tools for the driver
- Using our pretrained algorithm sent to the device, the driver's phone camera will label what tools are present
- The driver has the ability to custom label any tools that the algorithm or camera couldn't see. This information can feed back to our algorithm and strengthen it
- An incentive structure for the drivers' use of our mobile app would encourage drivers to leave each hospital with a complete set of tools

# Exploring App Features →



App Entry

MEDICAL INVENTORY MANAGMENT

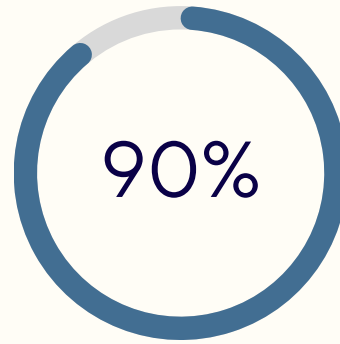
# Signing In / Up

We created a simple user friendly interface, ideal for an easy login experience for all third party tool drivers.

Simple

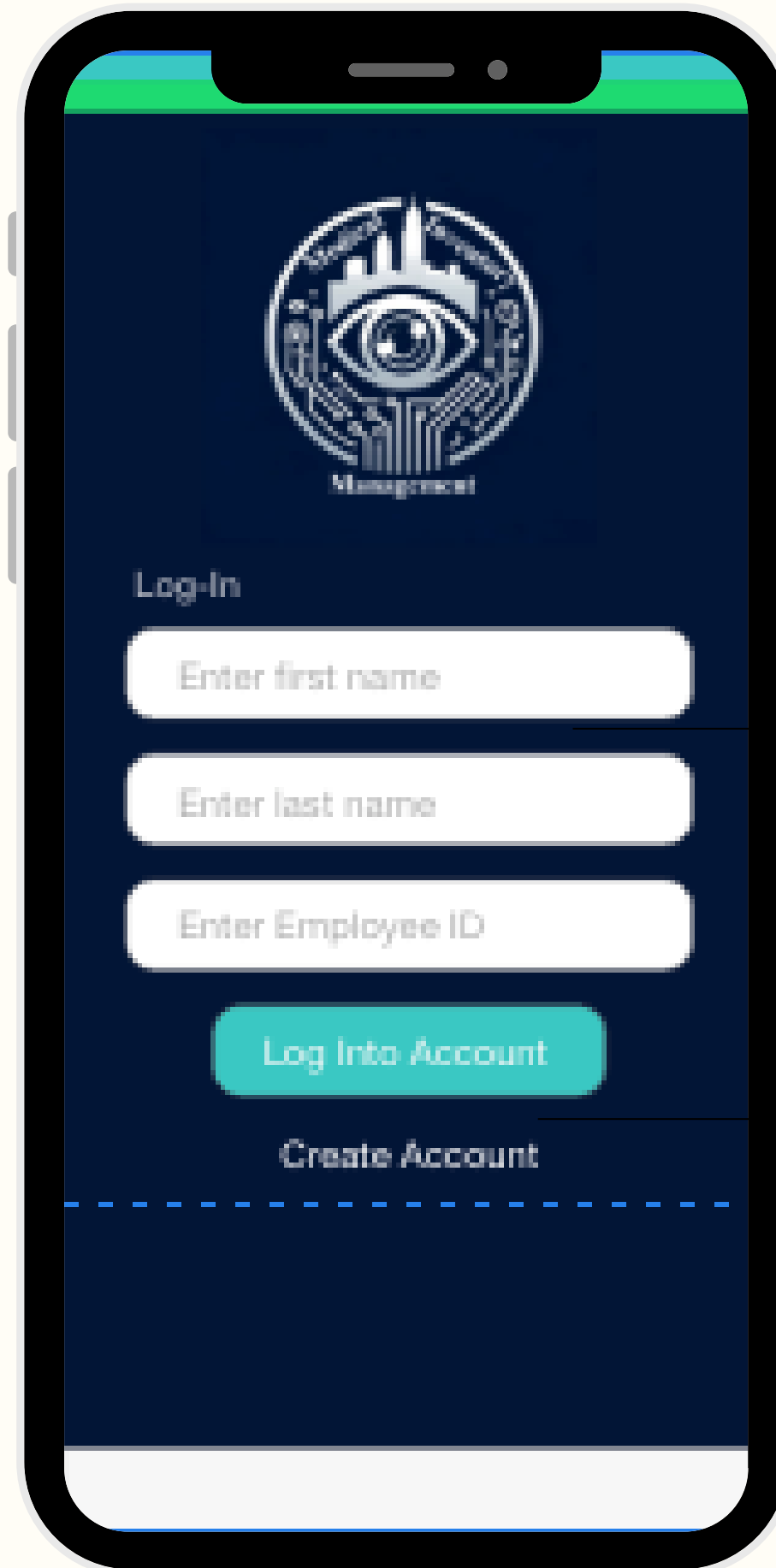


Would use



**Keywords**

Simple  
User friendly



## ● Simple Log In Process

Users can log in by simply using their name and 6 digit employee ID

## ● Simple OnBoarding

Creating an account is as simple as using your name and employee id



Home Screen

# Home

### Driver Quickview

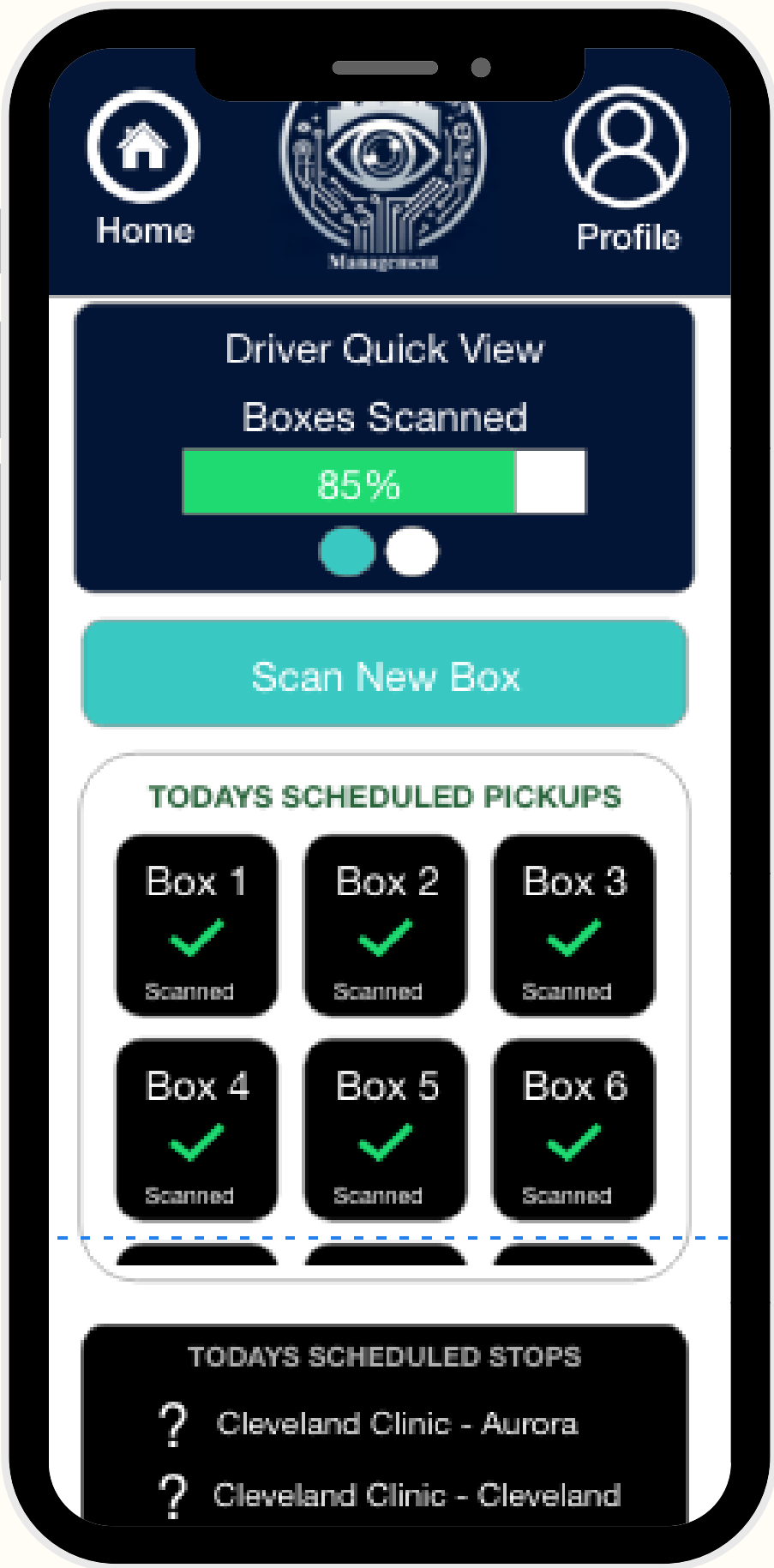
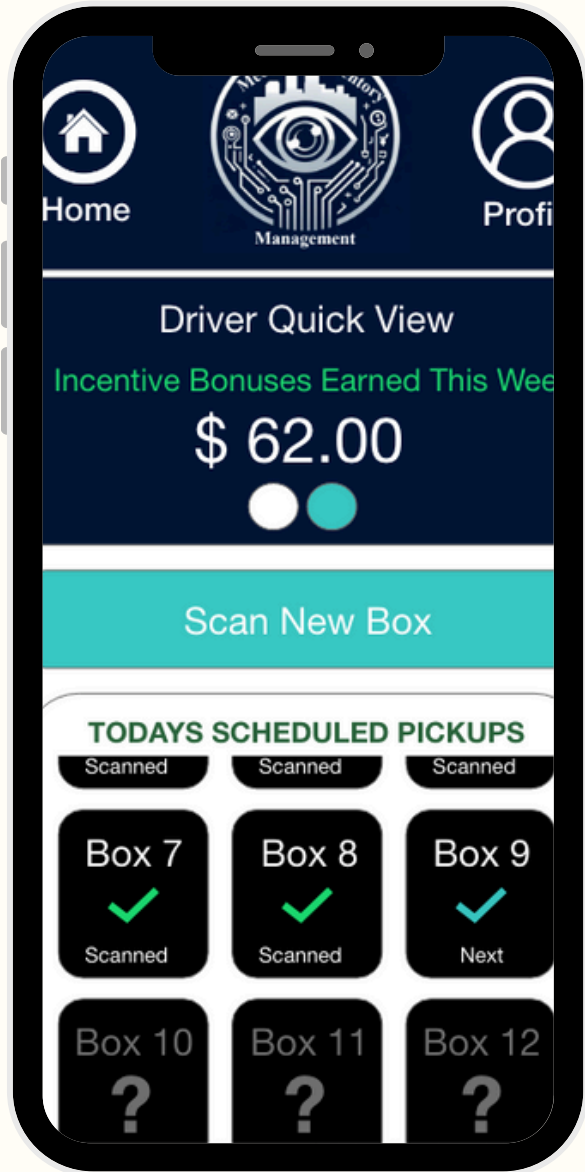
- Driver Incentive
- Todays Progress

### Driver Inventory Dashboard

- View Boxes Scanned
- View Boxes Left to Scan

### Driver Scheduled Stops

- Save Gas, Money, Time with Scheduled Stops



### ● Driver QuickView

The Quick view widget informs drivers of their progress as well as incentive pay earned!

### ● Drivers Inventory Dashboard

Showcase recent purchases in the shopping module and the latest comments in social.

### ● Drivers Scheduled Stops

Allows company to save gas, money, and time with scheduled stops

Inventory

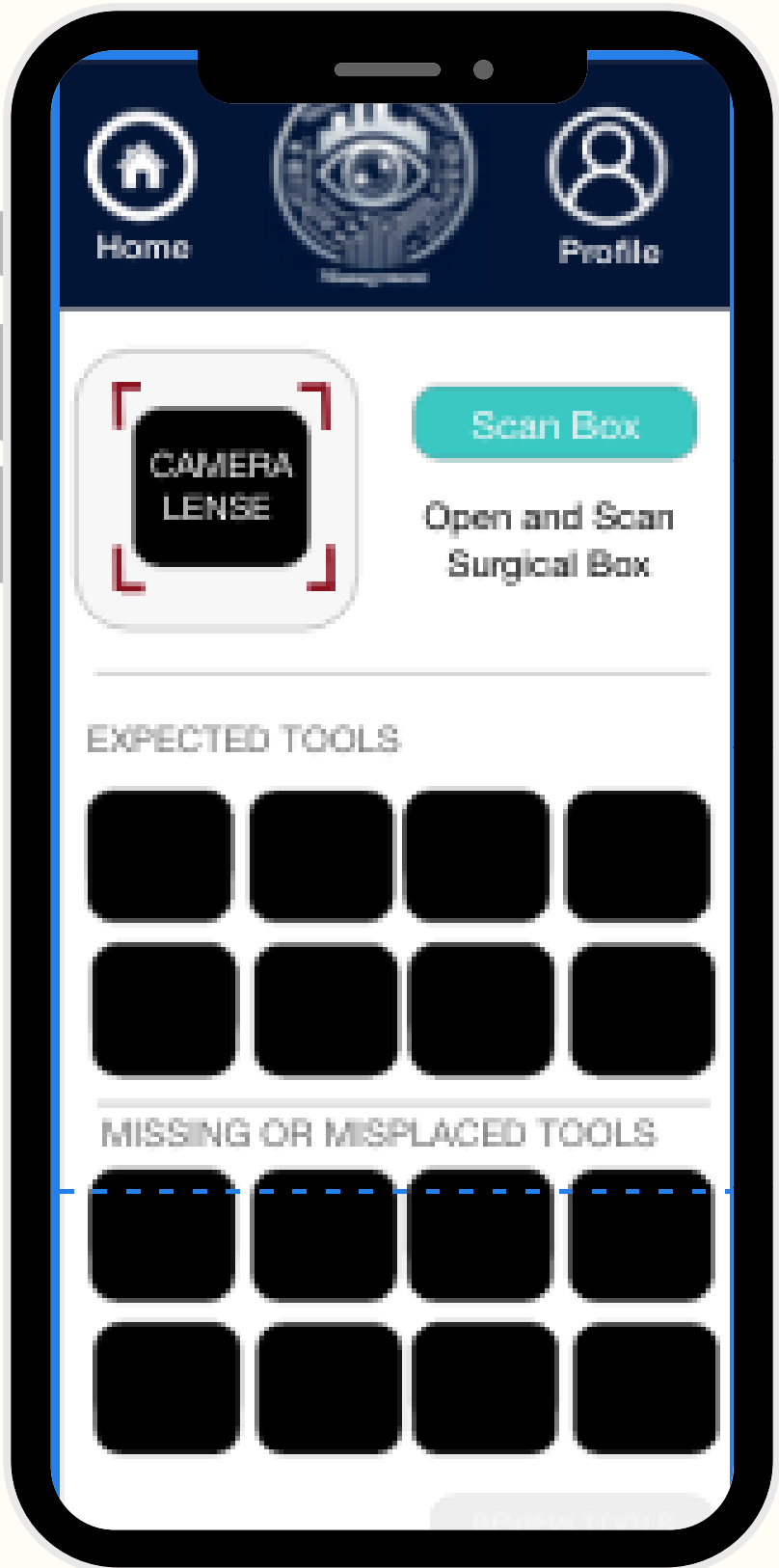
# Tool Box Analysis

## Scan and Review

- Camera for Scanning
- Add Custom Tool

## Medical Tool Inventory Analysis

- Expected Tools
- Missing Tools
- Misplaced Tools



### ● Camera For Scanning

Allows driver to scan surgical tool box fr instant

### ● Medical Box Expected Tools

Helps the drivers see what tools are expected in the specific box

### ● Missing or Misplaced Tools

Helps the drivers see what tools they should look for immediately

Inventory Details

MEDICAL INVENTORY MANAGMENT

# Tool Box Analysis

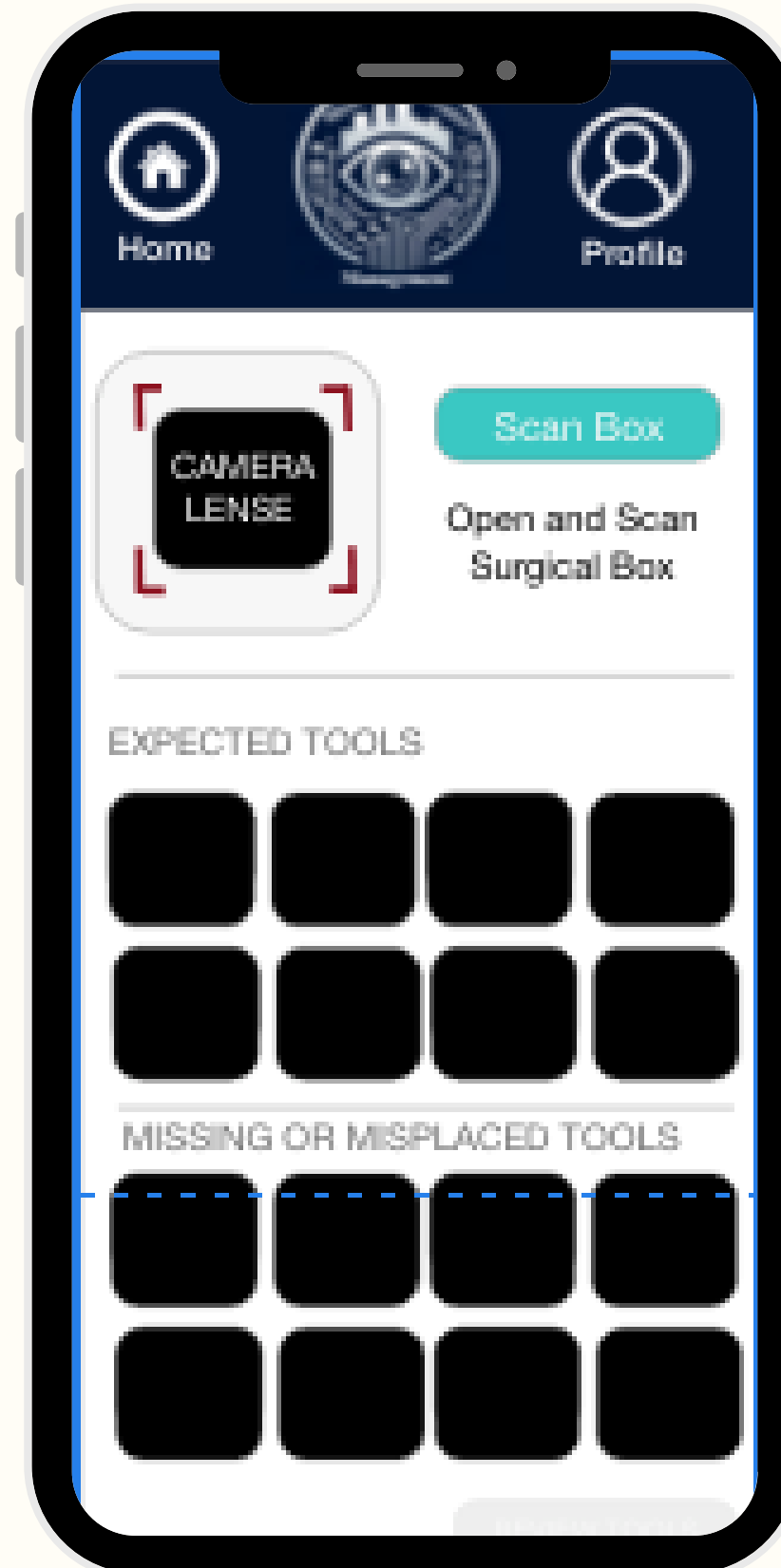
## Scan and Review

- Camera for Scanning
- Add Custom Tool

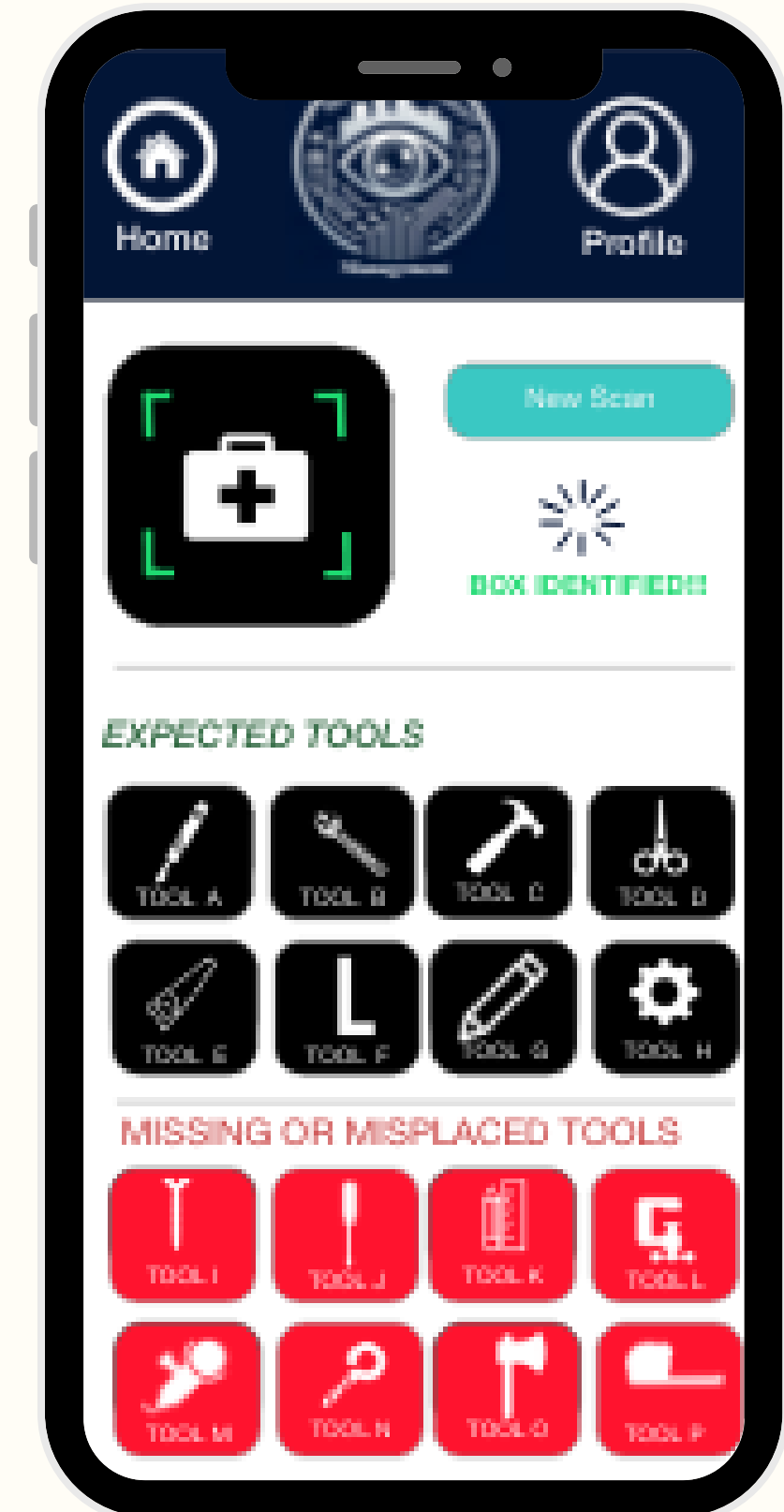
## Medical Tool Inventory Analysis

- Expected Tools
- Missing Tools
- Misplaced Tools

## Before Scan



## After Scan



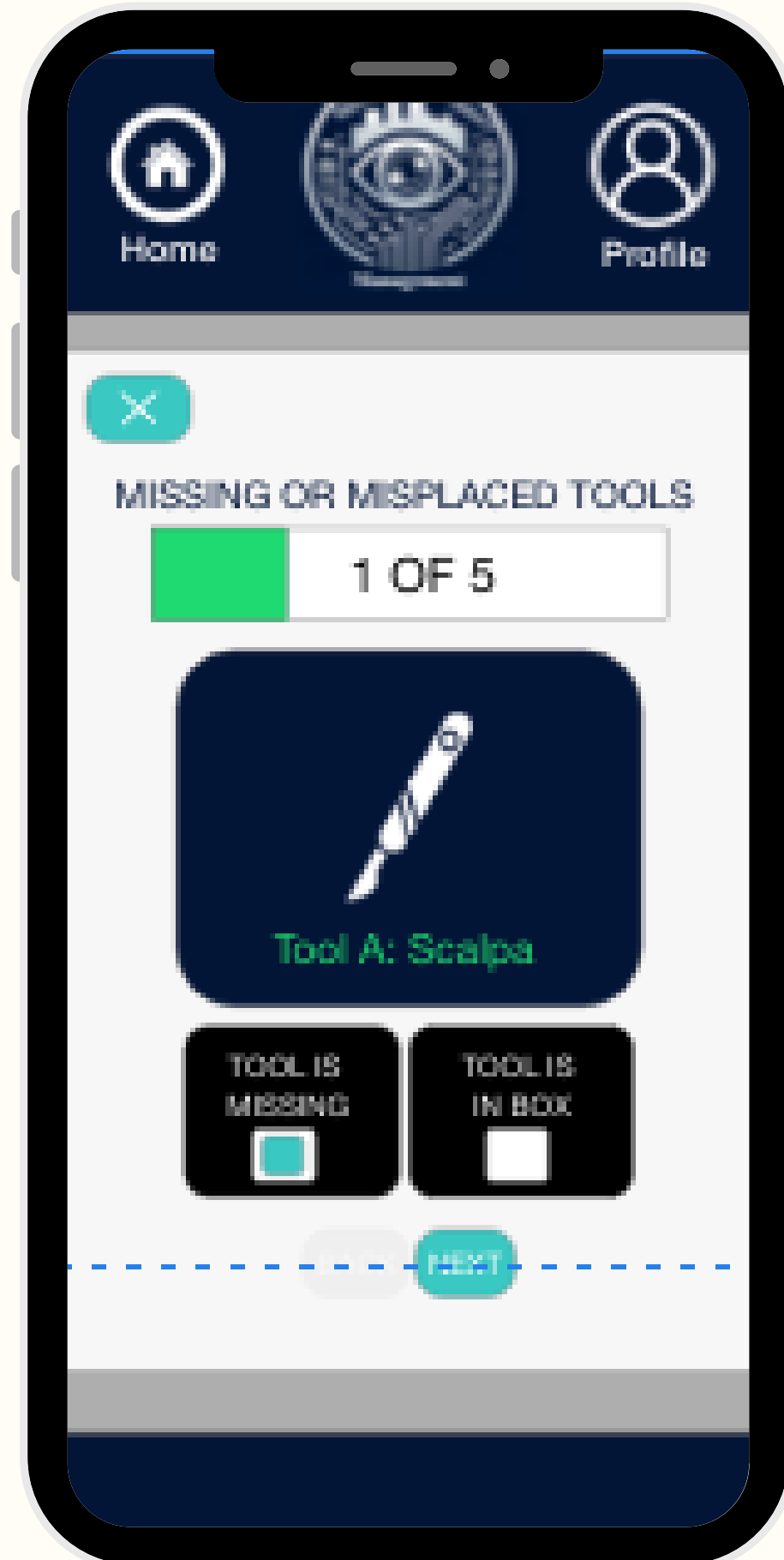
# Sorting Inventory

## Tools

- Visual Representation of Tools
- Tool Name Identified
- Progress Representation

## Checking AI - Sorting Inventory

- Tool is in box
- Tool is Missing



## ● Progress Bar

Progress bar allows users to see how many

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## ● Tools

Drivers are able to see the exact tools their looking

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## ● Sorting Tools

Drivers can quickly sort and classify a tool as missing, in in the box

Camea

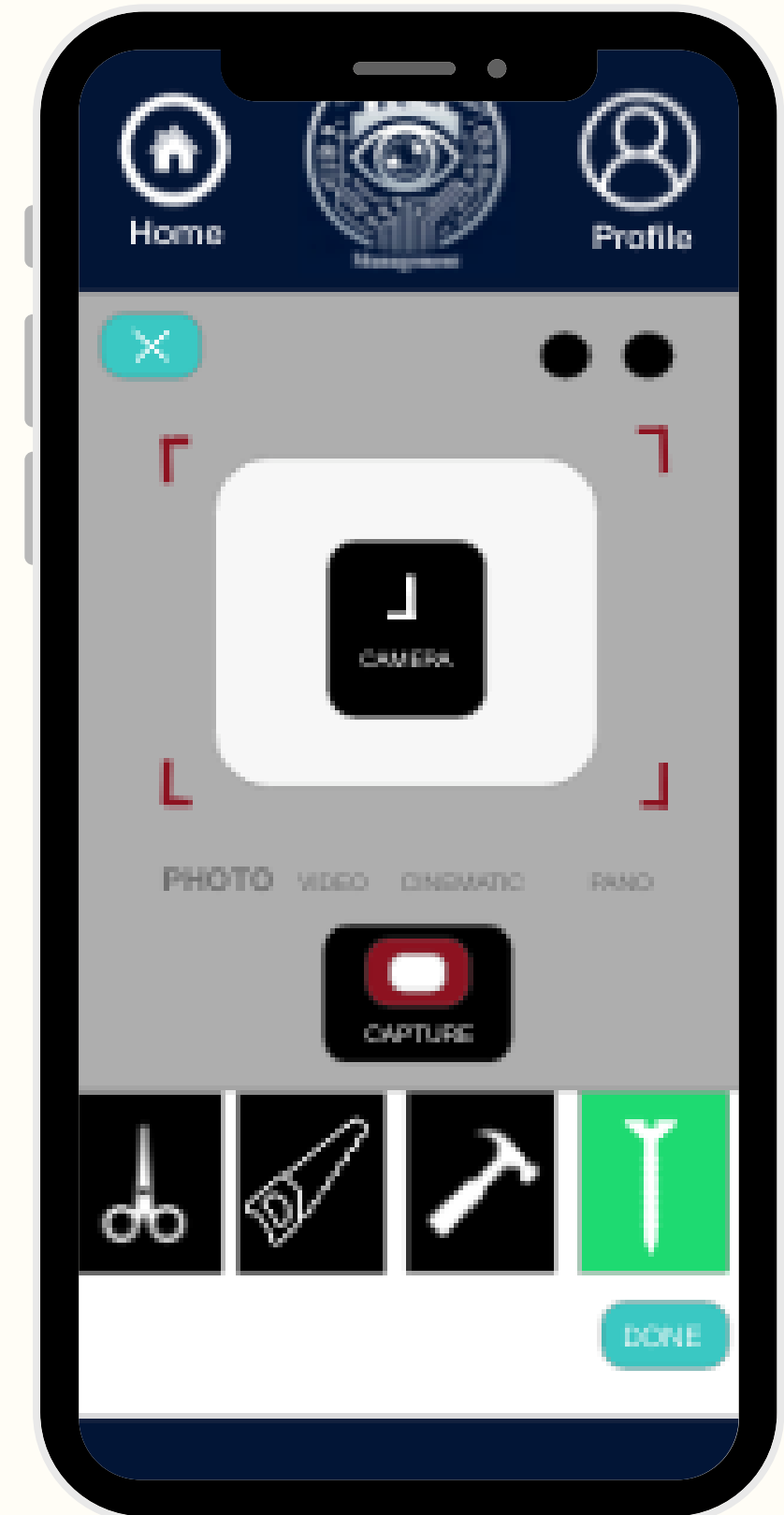
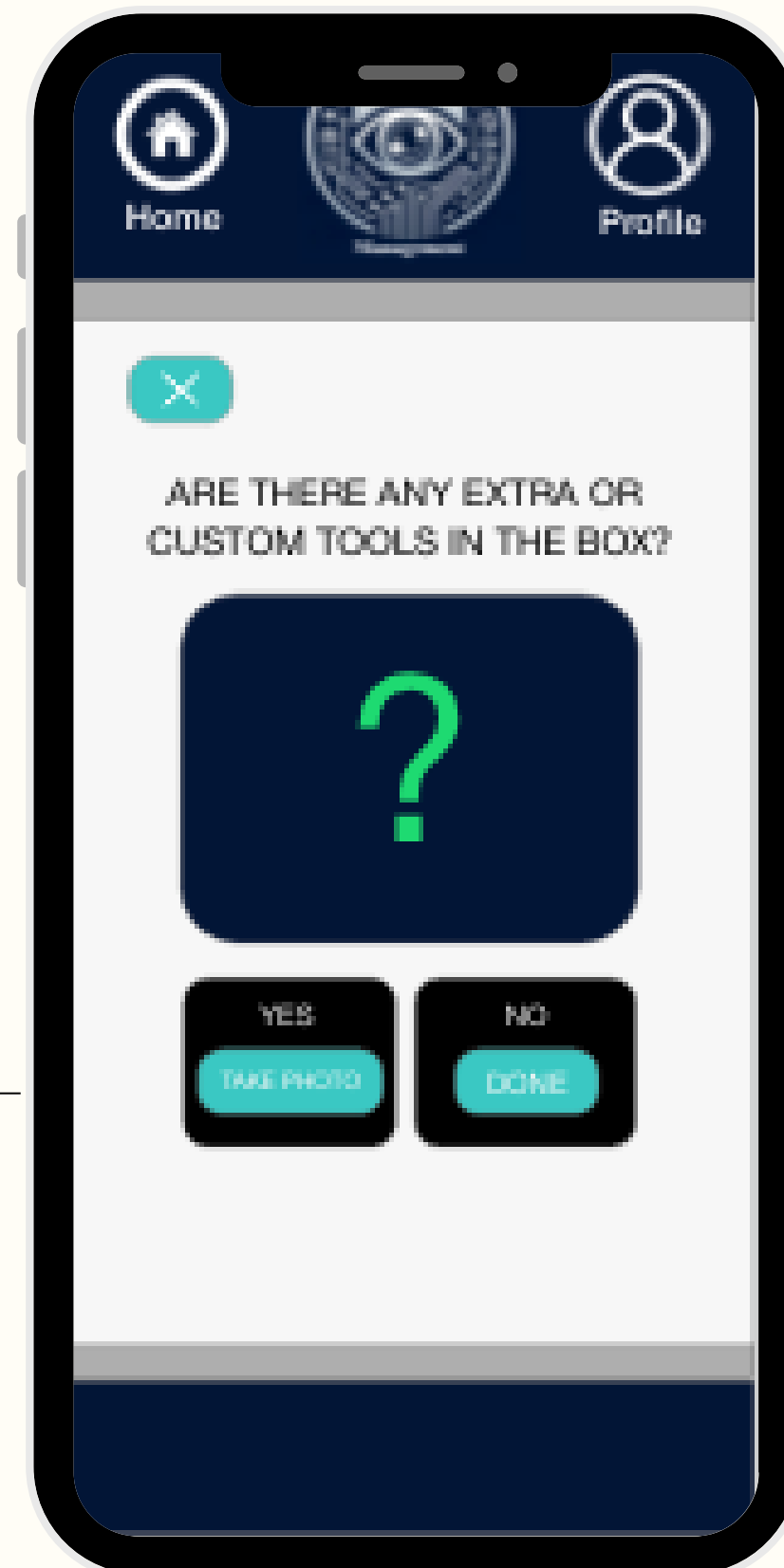
SMARTPHONE PORTRAIT

# Custom Tools

Many tool kits contain custom tools. Drivers can take photos of custom tools and we can locate and track

## Camera

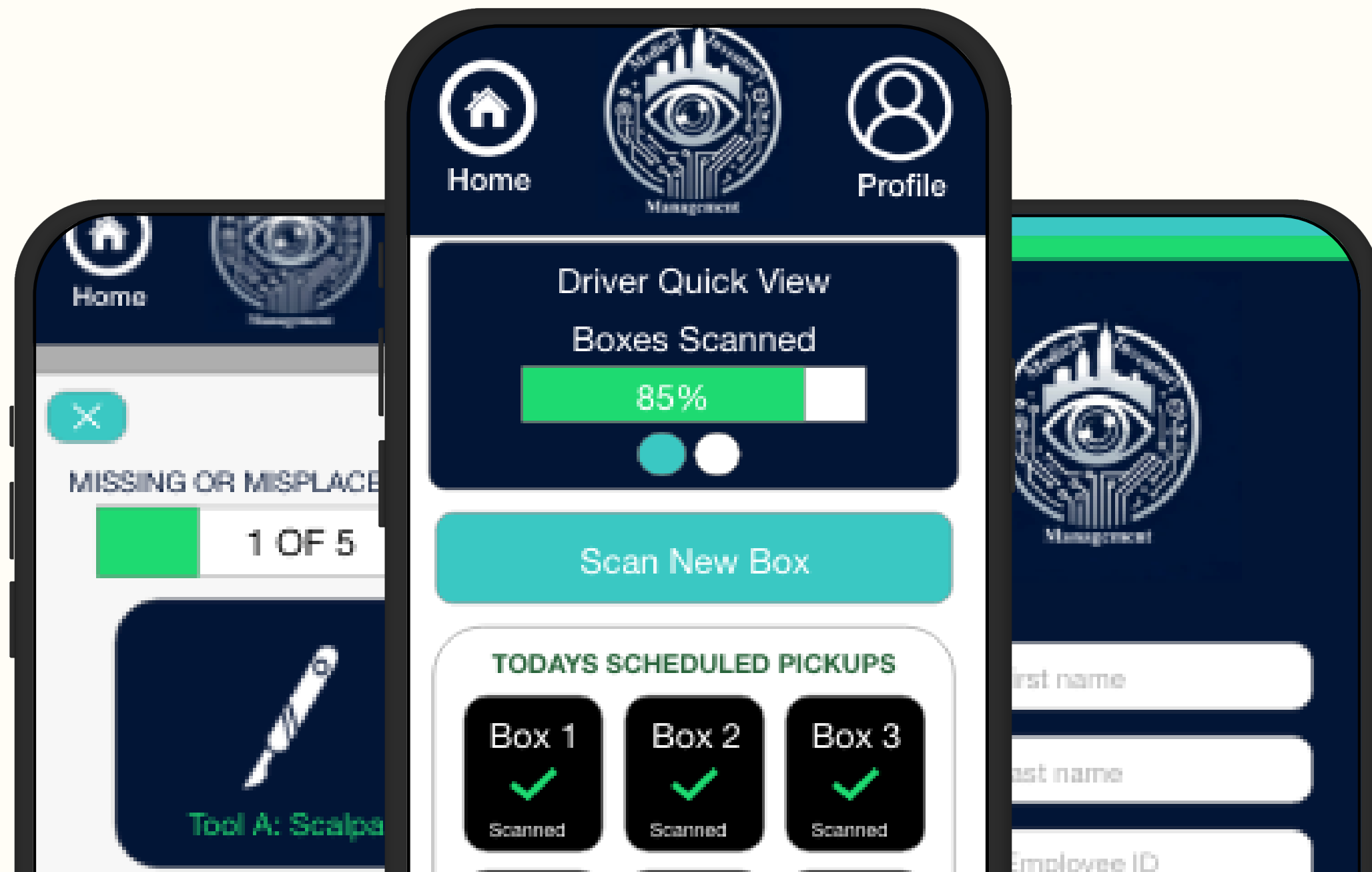
Drivers can use their camera to scan and record any custom tools they find inside of the surgical box.



Product Mockups



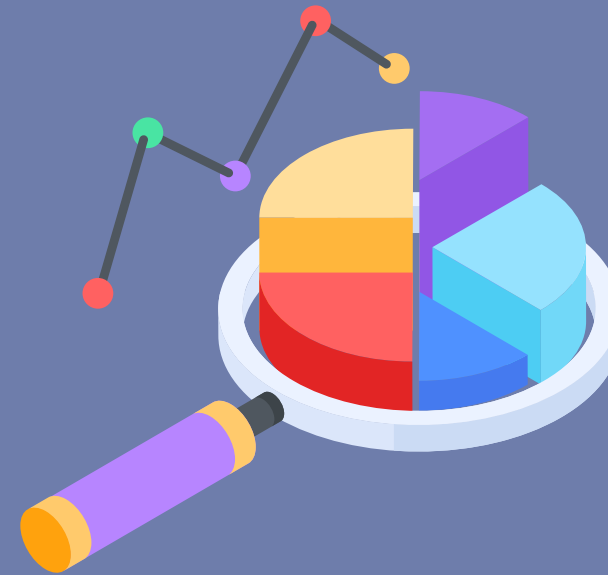
# Medical Inventory Management Investors



**Market Research**  
**Financial Outlook**  
**Expansions**  
**Investor Outlook**

# Market Research

Within the Cleveland Metro area alone, Stryker, Medtronic, Zimmer Biomet, Johnson and Johnson, Boston Scientific, and Smith and Nephew all have distribution facilities, some have multiple



Stryker, a third party tool provider recorded \$20.5 billion in medical equipment sales in 2023 alone Stryker has 322 leased or owned non-manufacturing locations

## Opportunities For Expansion

- The medical equipment industry is massive
- Hospitals utilize many different companies' tools
- To recognize these tools, a very large dataset is needed.
- As we integrate more 3rd party companies into our mobile app system, we will be able to grow our dataset to a suitable level to enter the CSU
- Within the CSU, we can automate the tool identification problem and alleviate the inhouse loss of medical equipment



## SMARTPHONE PORTRAIT

# Financial Outlook

- Our startup is relatively low burn having spent \$1,660 so far on data collection/labeling and computer/camera equipment
- Data buildout will cost ~\$66,000 per distribution center with ~\$10,000 monthly revenue per facility depending on the size
- We expect to start bringing in revenue by March at the latest

## TIMELINE TO PROFITABILITY

- September: Tool recognition software is presented to 3rd party provider
- October: Initial dataset is built out within the providers warehouse
- December: App interface is integrated with 3rd party Providers
- January: Kinks in app interaction with 3rd party Providers software worked out
- March: Implementation of our product at the 3rd party Providers hip and shoulder facility
- May: Move on to other 3rd party Providerswarehouses and repeat data buildout when necessary



Cost Breakdown Per Surgical Kit

Task	Cost	Justification
video / Image	\$62.00	2 Employees @ \$17hr for 2 hrs
Labeling	\$140	2 Employees @ \$7hr for 10 hrs
training	\$20.00	Remote Training @ \$7hr for 3 hrs
Total	\$222.00	
Estimated 300 Surgical Kits	\$66,600.00	

Month	Revenue-Expense	Justification
October	\$66,000	Data Set Creation
Novemebr	0	Testing
December	0	app integration with tool provider
January-February	0	Live Beta Testing
March	\$15,000	Final Deplyment
April	\$15,000	Monitoring
May	\$10,000	Facility for additional Data
june	\$10,000	Facility for additional Data
july	\$25,000	Expansion to next facility

# Investor Outlook

## Predicting

We predict rapid growth following our implementation in the first 3rd party tool providers warehouse as the dataset in other regions with hip and shoulder surgery distribution facilities will be very similar



## Asking

We are asking for \$120,000 in capital to build our first dataset and integrate our platform with a 3rd party tool providers shoulder and hip facility in Northeast Ohio



## Expecting

We are expecting \$365,000 in revenue in 2025





# Thank You

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