

# KAUFLAND AIRMAP-CASE SOLUTION

*Using the Inter-Connection between Databases*



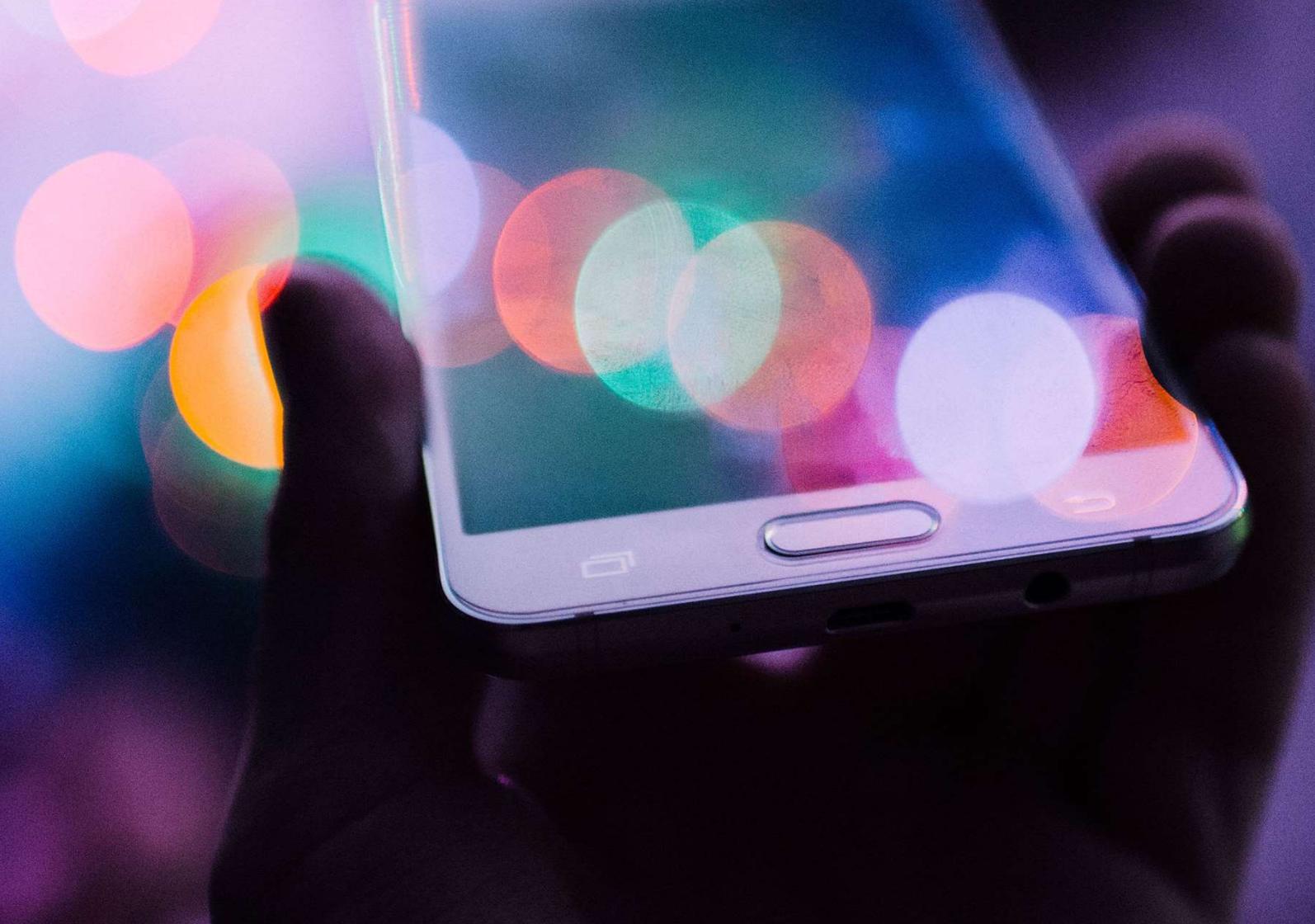
# THE INNOVATION

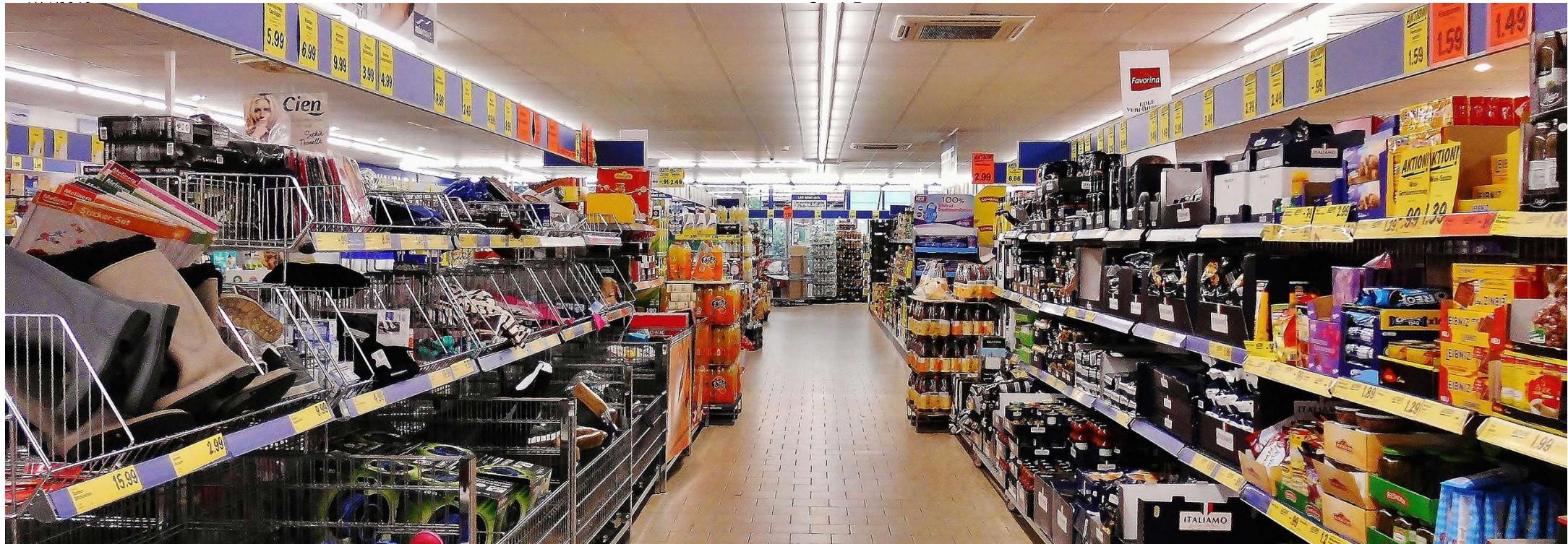
*What We Have Done?*

## To Tackle this problem we are introducing new Technology

- Image Processing Camera
- RFID Tags and Scanner
- Robots (Pick and Place)
- Application for Consumers and Retailer

# 1. THE APPLICATION DEVELOPMENT





The Application will help the Customer whenever he/she Selects the Shop (from Shop list) he/she will be provided the layout of that particular Shop with every product's dedicated shelve. Then , He/She can check all the details of the product which they have selected(from product list) like MRP as per its Size or Weight.



# FUNCTIONS

1. Map (Which Contains the Blue Prints of Super Market)
2. Search bar (To Find Specific Product)
3. Scanner
4. Account Details (User / Employee Account)



**LOCATE  
ITEMS**

*EASY TO LOCATE THE ITEMS IN THE  
DEDICATED SLOTS*



# BENEFITS OF APPLICATION

- Time Efficient
- Systematically Arrangement of Database
- Time to Time updation of Products

- Reduce Misunderstanding of Customer
- Makes Guidance Easy

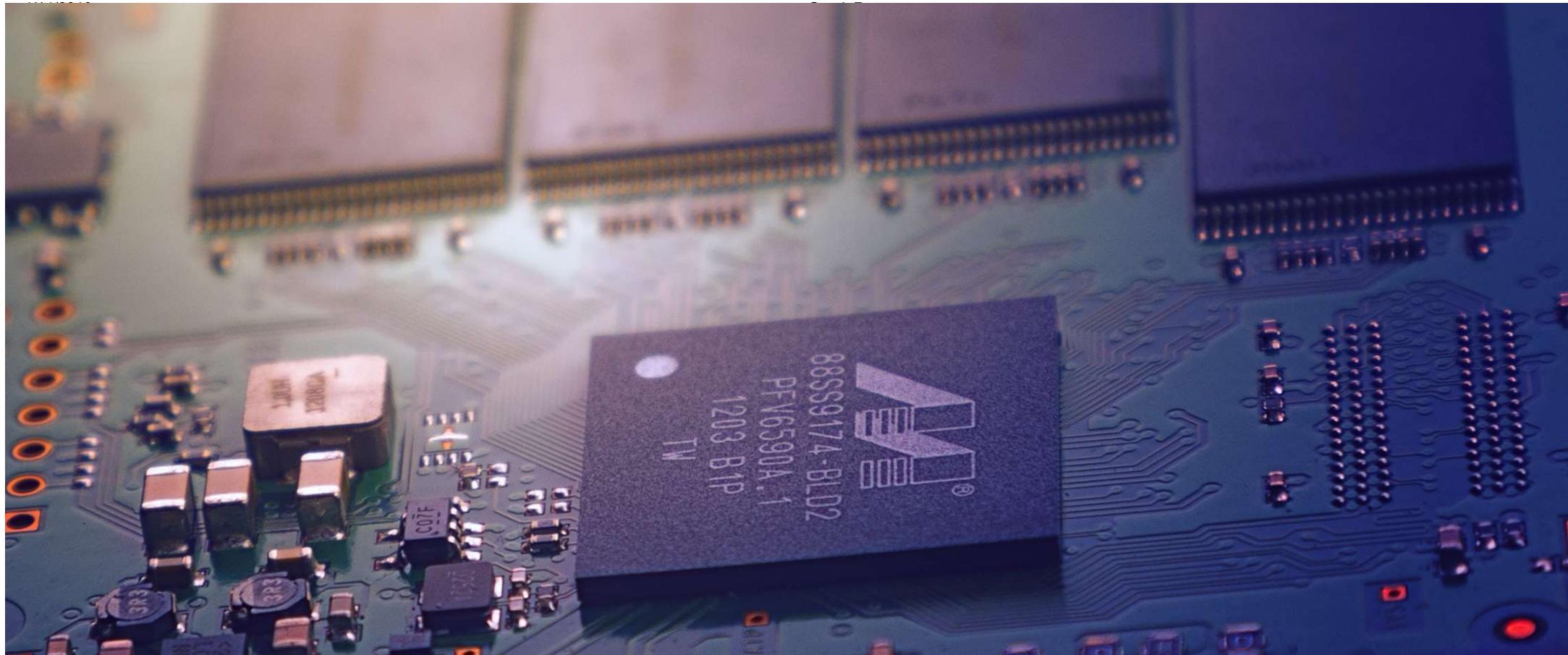


GOOD  
ON  
YOU

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## 2. RFID TECHNOLOGY





# RFID TECHNOLOGY

*What is RFID ?*

- Radio Frequency Identification
- A micro-chip in a label used to transmit data when the label is exposed to radio waves

## PRODUCTS

Our Works



UHF RFID Tags



UHF RFID Terminals



Readers, Antennas and Components



UHF RFID Mobile Readers



UHF RFID Software Solutions



UHF RFID Textiles

# RFID RETAIL SUPPLY CHAIN

## *Benefits at Glance*

- Decrease in lost stock
- Faster locating stock
- Lower labour requirement

- Reduction of out-of-stock
- Low safety stock level



# PREFERENCE

*Reasons of Preferring RFID over BAR-CODE*

- Ability to read more than one item at a time
- Read the item while moving
- Line of sight is not required

- Built in security
- Environmental resistance
- Number of reads



# THE SETUP

## *Parts:*

- Link the Database with RFID Tech and the Mobile Application
- By Installing MV-BlueLynx(Image Processing Camera) and RFID Scanner
- Introduce an Extra Rack in Each Row



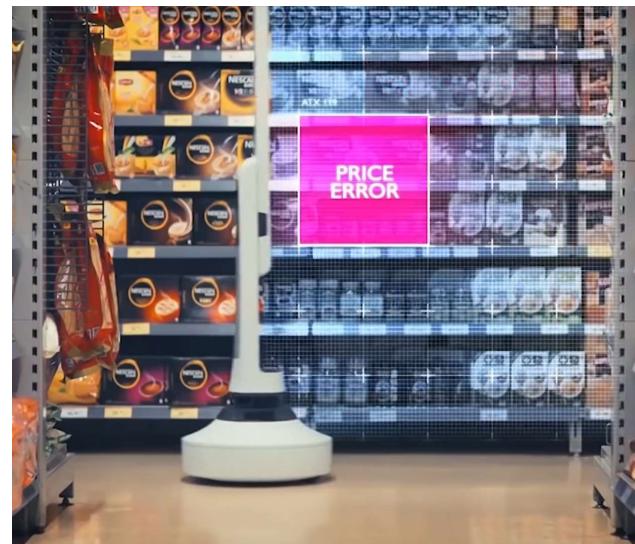
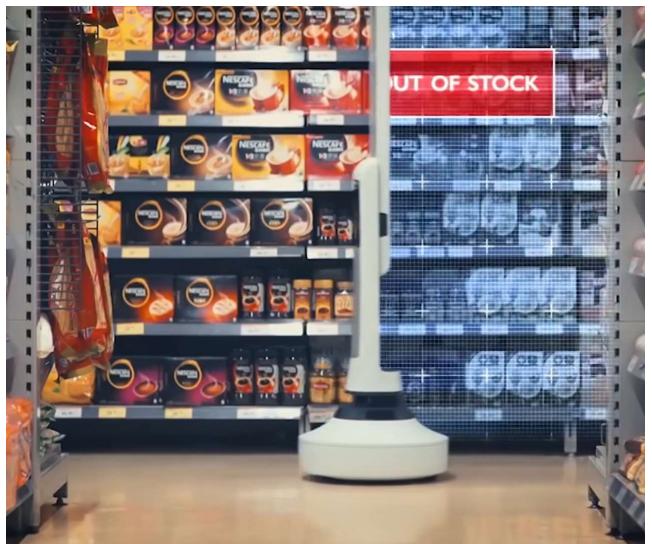


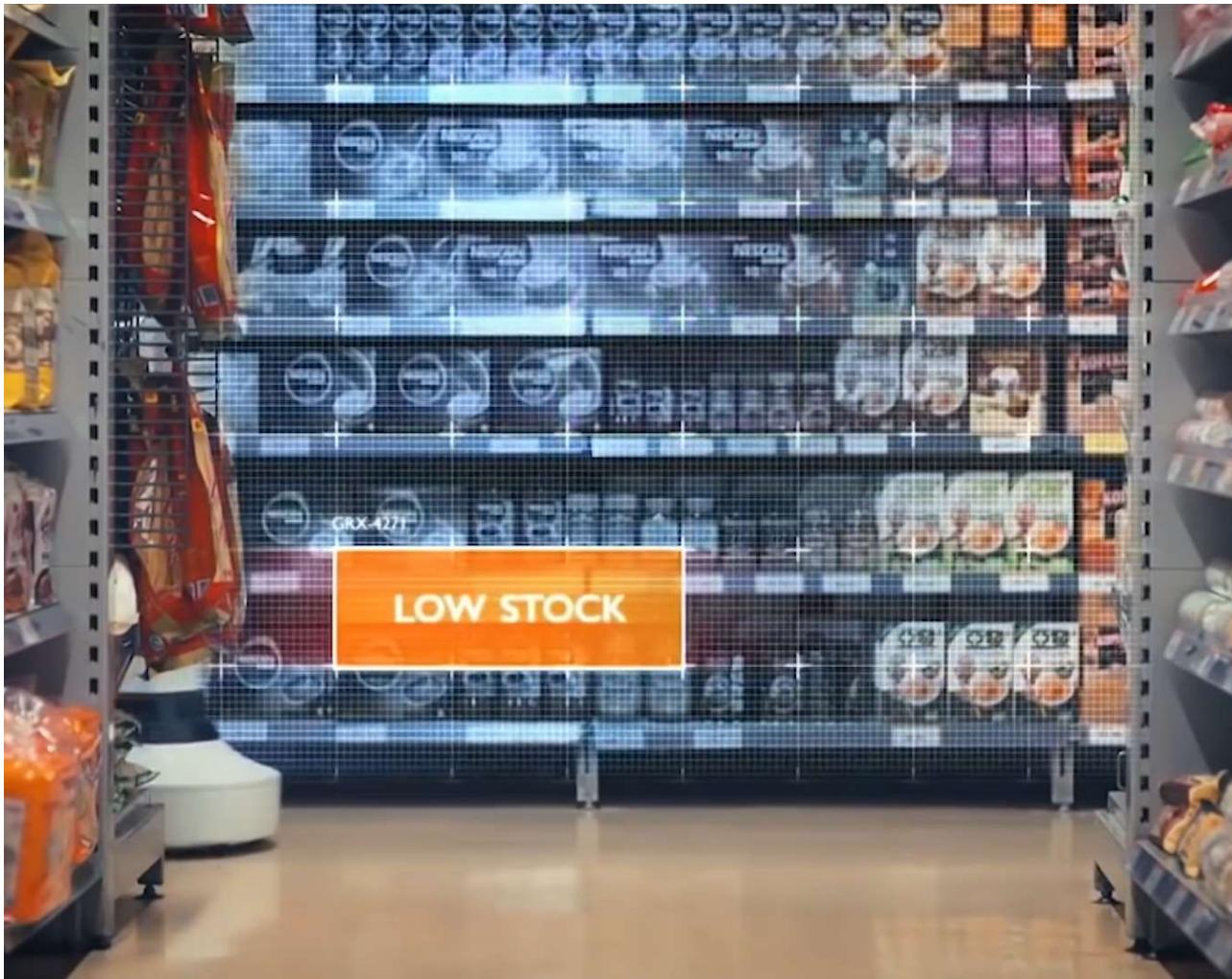
## WORKING

- Each Shelf Contain RFID Scanner which scan all the Tags of Products and Compare it With the Database
- Database Contains all the information about the Products in Each Shelf (like color, weight, price, quantity, etc.)
- If Any Mismatch Found It alert the Message to the Robot/Staff

## *Check Conditions:*

1. RFID Count checked in the Database. If the data doesn't match it alerts then it checks whether it is taken by Customer or not.
2. Image Processing (3D Camera) will check all the images of product (by Different angles) which are already in database.
3. The 3D Camera also checks the Floors for fallen products and checks whether it matches with database.





3D Image Processing



THANKING YOU

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# CHIRAG MISRA & AVISH DHIRAWAT

## Credits:

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