



ADROIT WORLDWIDE MEDIA, INC.

A vision technology company

Powered by Artificial Intelligence, Computer Vision, and Machine Learning

ARTIFICIAL INTELLIGENCE AND COMPUTER VISION TECHNOLOGIES

- Autonomous Shopping
- Automated Inventory Management
- Consumer Behavior Tracking



MACHINE AND DEEP LEARNING TECHNOLOGIES

- In-Store Analysis
- Global → Local Level Reporting
- Predictive Analytics



AWM Frictionless™



Cashierless Checkout

Aii®



*Automated Inventory
Intelligence*

Ad Exchange



*In-Store Digital Ads and
New Revenue Streams*

Retail Analytics Engine



*Valuable data on the
customer, product, planogram,
and campaigns*

AWM Frictionless™



Cashierless Checkout

Utilizing deep learning to enable shoppers to walk in and walk out and be automatically charged for items taken without scanning them

5. CHECK OUT

Upon leaving the store (or designated Frictionless area) customers are charged via their digital wallet, receiving a receipt via email or text. In other configurations, a POS kiosk may auto-populate the customer's cart for checkout, allowing use of conventional payment methods such as cash, credit, etc.

1. SESSION START

Shopping sessions can start in a variety of ways depending on retailer's preference. In a standard set up, customers initiate a transaction at an entry gate using a personal QR code from an app. Facial recognition can also be used for identification. Other setups can be configured without an entry gate or even without an app.

4. PRODUCT TAKES AND PUTS

Using deep learning models trained on product & positioning data from our Product Mapper software, the system determines when customers interact with products & whether to add or subtract that item from their cart.



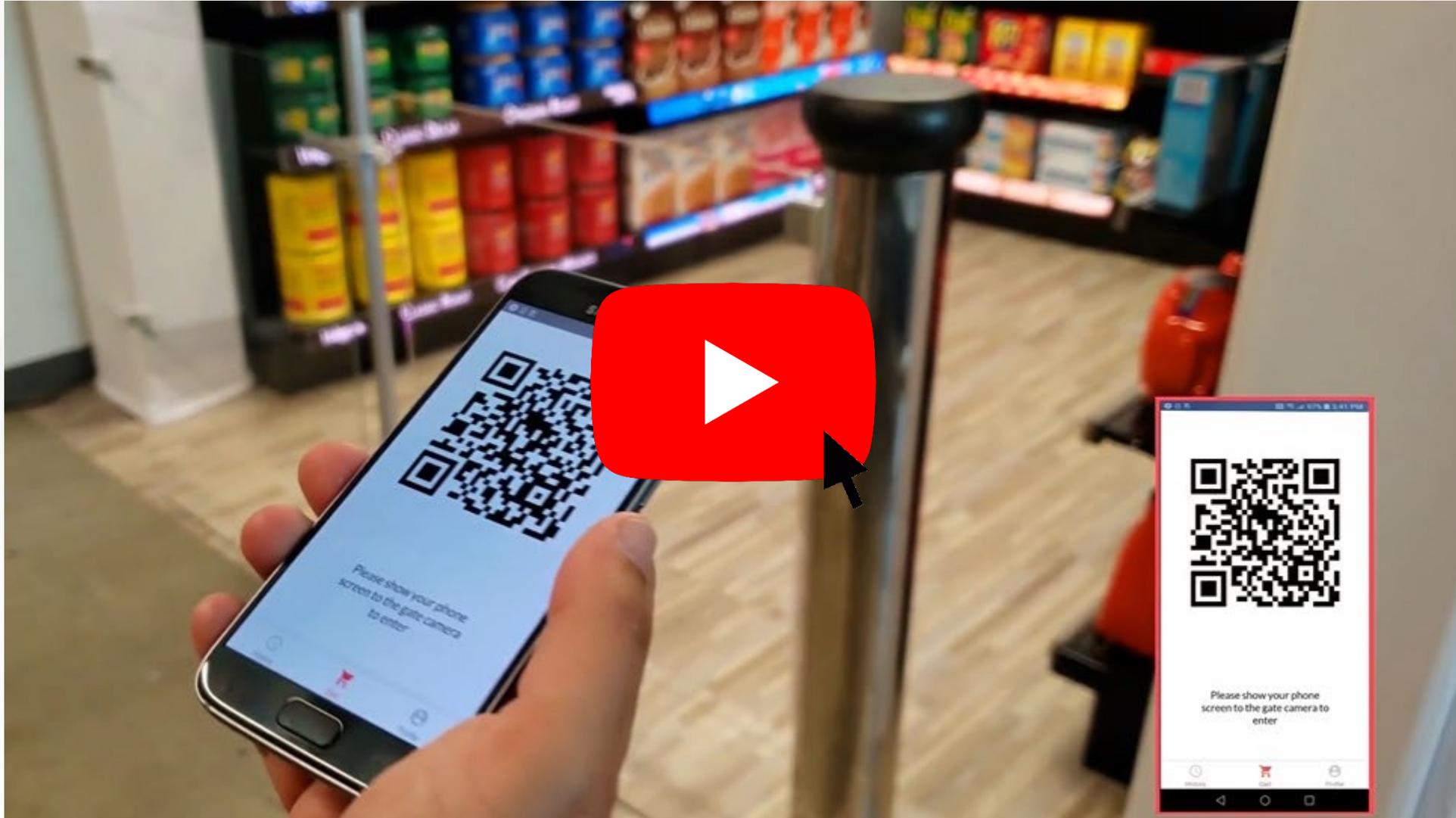
2. PERSON DETECTED

Upon entering the store, strategically placed cameras capture the scene. Deep learning models running on local servers to detect humans in these video feeds.

3. ANONYMOUS TRACKING

When a shopping session is started, customers are assigned a random ID. A central server uses this to track each shopper throughout the store as they pass from camera to camera.

FRICTIONLESS DEMO



Aii[®]



Automated Inventory Intelligence

Enables real time tracking of all on-shelf inventory at a global level at accuracy rates above 95%.

5. PRODUCTS RESTOCKED

After the OOS alert is deployed, the store associate heads to the back to grab additional inventory of the product. OOS alerts in real time lead to less empty shelf space and more opportunity for additional sales.

1. PRODUCTS TRAINED

Selected products are trained utilizing AI and CV into the Aii® portal. Once a product is trained, it is in the system forever and will not need to be retrained in the future. Trained products link to the exact products on-shelf.

4. OUT OF STOCK ALERT SENT

In addition to an OOS message displaying on-shelf, an alert is sent to the nearest store associate. The store associate in the aisle over receives the alert and ensures the products get restocked as soon as possible.

2. PORTAL CONFIGURATION

Once products are trained, the Aii® portal is configured to send out of stock alerts at a desired frequency. In addition to out of stock alerts, the portal can be configured to alert at specific stock levels (i.e. 10%, 50%, etc.)



3. CUSTOMER SHOPS

As a customer shops, once the last product is grabbed off the shelf, an out of stock alert will display on the shelf. As you see above, the customer has placed the last Hershey's bar package into her cart from the left side of the shelf, displaying an OOS message on the digital shelf edge.

Aii®



AM

Ad Exchange



In-Store Digital Ads and New Revenue Streams

5. ADDITIONAL REVENUE

Once the ad is played, the customer is more likely to purchase additional products leading to more products sold and additional revenue generated from cost of ad playing on digital shelf.

1. ADS LOADED TO PORTAL

Create and upload an unlimited amount of bite size ads to AWM portal.

4. CROSS PROMOTION AD DEPLOYED

Once customer is identified, a targeted ad is selected from the portal to play based on the customer. In this scenario, a chip dip ad is selected to play for the 27-32 yr old male.

2. CUSTOMER ENTERS ZONE

Customer enters pre-identified zone that is ad enabled to play ads based on who is walking by.



3. FACIAL DETECTION

Cameras detect detailed demographics of the customer to determine which ad to match to the identified customer.

AD EXCHANGE



Retail Analytics Engine



Valuable data on the customer, product, planogram, and campaigns

5. CUSTOMER BEHAVIOR TRACKING AND MORE

The RAE will also track and show customer behavior like falls, low inventory or out of stock products, camera issue detection, and more.

1. CLIENT LOGS ONTO PORTAL

Customer can access portal from any location at any time.



4. PLANOGRAM COMPLIANCE DETECTION

High priority planogram compliance is detected and tracked utilizing a red highlight over each gondola that is out of compliance. Compliance issue examples could be a misplaced product, incorrect number of facings, etc.

2. SELECT GLOBAL OR LOCALIZED LOOK

Ability to look globally at all deployed sites or narrow down to specific local sites the user selects.

3. SPILL DETECTION

Any spill is detected at any given time using the rain drop icon. RAE will track what is spilled, when it is spilled, and approximately how long it took a store associate to clean up.



RETAIL ANALYTICS ENGINE

The interface is divided into several sections:

- Header:** "Aisle 1" with "Save" and "Push" buttons, and "Version: Convenience Store 4 changes to save".
- Navigation:** "Section 1" and "Section 2" tabs.
- Virtual Aisle:** A 3D rendering of a store aisle with shelves of products like coffee, cereals, and snacks.
- Product Details Panel:** "Selected Product - CHEERIOS 120Z" with a product image and placement information: "Section 2 | Shelf 4 | 40 in".
- Product Details Table:**

| | | | |
|----------------|---------------|------------------|--------------|
| UPC | 01600048772 | Alignment | Left |
| Name | CHEERIOS 120Z | Fill Width Color | [Blue bar] |
| Description | CHEERIOS 120Z | BG Color | [Black bar] |
| Display Name | GENERAL MILLS | Image | IMAGE |
| Display Desc. | CHEERIOS 120Z | Flag Img | None |
| Price \$ | 2.98 | Special Program | None |
| Sales Price \$ | 0.00 | Mod Sequence | MOD SEQUENCE |
| Unit Price | 0.25 | # of Facings | 5 |
| UOM | OZ | Shelf Capacity | 1 |
- Footer:** "Undo Changes" and "Save Product Details" buttons.

A large red play button icon is overlaid on the virtual aisle, with a black mouse cursor pointing to it.



CASE STUDIES



Several dozen store test utilizing foot traffic data collection software by AWM's Proximity Camera instead of T logs. Retailer realized store traffic is highest in the late morning and that there is an opportunity to convert breakfast to post-breakfast consumers.



Multiple store test utilizing digital shelf edge, proximity triggering, and demographic engine yielding in 39% sales uplift for Pure Leaf Tea, 11% sales uplift for Pepsi 2-liters, and 300+% uplift for Crush, Sierra Mist, Mug, and other Pepsi brands on end cap.



Implementing digital shelf edge and Product Mapper to increase operational efficiencies and reduce labor costs, Walmart has seen a 40% reduction in labor costs.

DRIVING CUSTOMER DEMAND

PROBLEM

SOLUTION

Slowing in-store sales with increased online competition



AWM sees an at least 30%+ sales uplift with every brand and retailer we work with

In-line wait times are increasing due to retailers understaffing



AWM Frictionless™ eliminates the line and opens new market disruption opportunity by creating hyperlocal micro-stores

In-store and online promotions are not synced, there is lack of omni-channel experience to customer



Dynamic digital ads play at shelf leading to increased engagement, more relevant ads, and helpful promotions



COST SAVINGS PROVIDED

PROBLEM

SOLUTION

Paper price tags lead to unnecessary environmental waste and increased labor costs



Product Mapper used in conjunction with digital tags provide massive labor savings in restocking and tag management saving approx. 1,500 hours per year in labor in one standard size aisle

On-shelf inventory is unknown at any given time



Aii® provides visibility to inventory on any shelf, at any given time giving the ability to DSD suppliers to know exactly what to stock and where to stock it before even arriving to the store

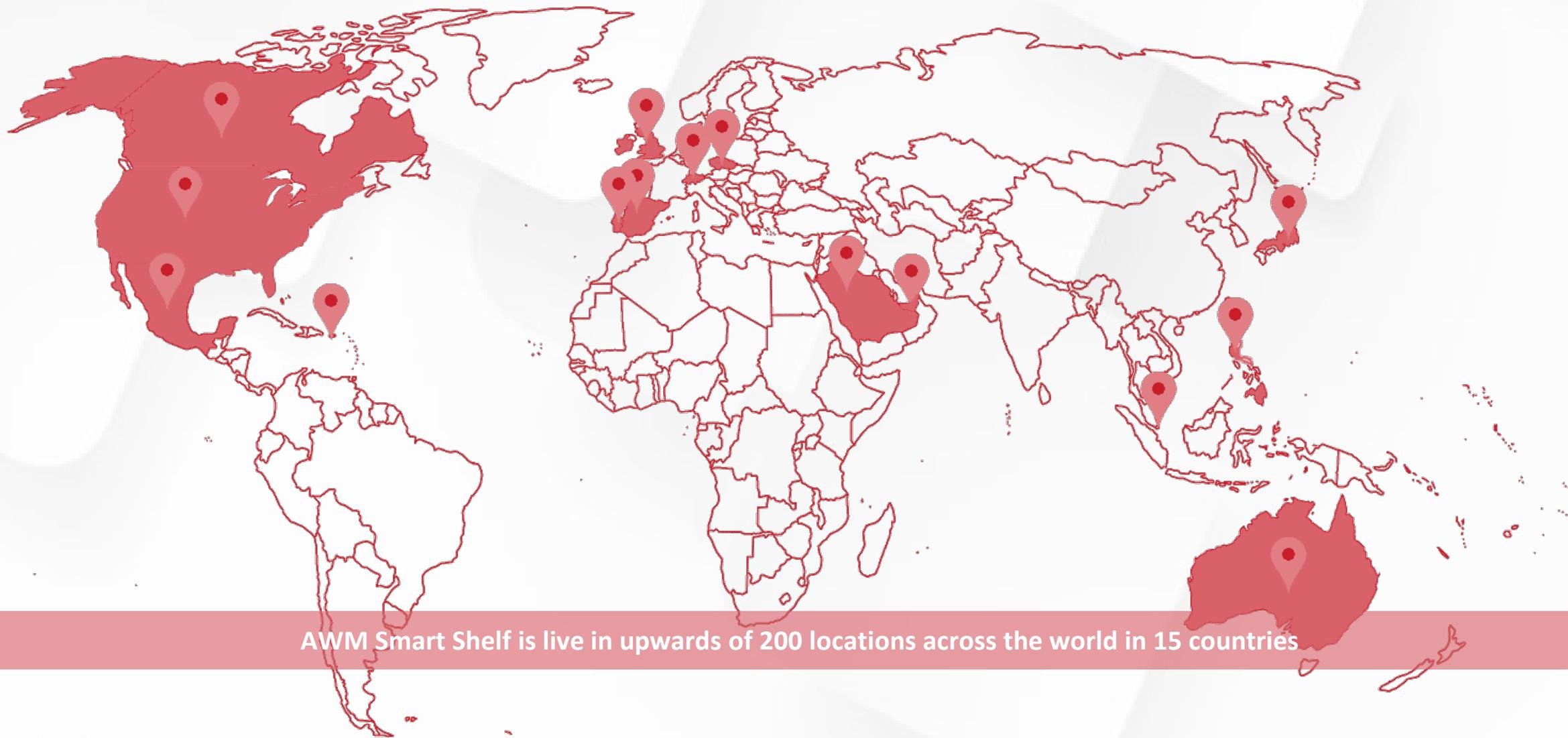
Expired food = no sales



Easily promote near expiring product before expiring, reducing waste and carbon footprint, while also increasing sales



MAP OF COUNTRIES DEPLOYING AWM SOLUTIONS



AWM Smart Shelf is live in upwards of 200 locations across the world in 15 countries





THANK YOU!

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