

## Autonomous Retail Is Smart, Efficient, And Profitable



Structural Concepts is the only refrigerated manufacturer to design and manufacture a **complete smart solution** for autonomous shopping.

Offsetting labor challenges, an appealing refrigerated or ambient merchandising format with increased capacity, a cashier-less transactional system, and the ability to streamline inventory management, this single solution provides a quick payback turning into increased profitability.



## Autonomous Retail Merchandising Explained











## A Fully Automated Experience for Consumers and Operators

Automated Checkout allows shoppers to browse products directly on the shelf, have their selections automatically added to the cart, and pay with credit/debit and mobile payment for faster transactions.

For the operator, the autonomous solution tracks inventory and requires less labor, resulting in increased productivity.






### ARM Features

-  Operates seamlessly in remote locations.
-  Safe and secure cashier-less transactions.
-  Holds 23% more product than other models; fewer and easier restocks.
-  Simplest and lowest flat fee structures.
-  Easy integration with existing payment systems.
-  Accepts most methods of payment.
-  Lowest overall operating costs.
-  Includes SCC's hallmark industrial design and features.

### For the Operator

- ✓ Location flexibility; seamlessly expand footprint throughout food deserts.
- ✓ Manage and track inventory more accurately; real-time insights.
- ✓ Sell more – waste less.
- ✓ Reduce labor – redirect tasks.
- ✓ Enhanced security – reduce theft.

### For the End-User

-  Convenient shopper experience; Available 24/7.
-  Simplified user interface.
-  Fully secured, accurate transactions.
-  Ensures greater food safety.
-  Easy to use; Creates familiarity.



# The Structural Concepts Autonomous Retail Merchandiser is an Ideal Solution for All Fresh Food Selling Environments



## Education

**38%** of college students want dining options open 24/7. *McKinsey*

**More than 50%** of institutions polled are interested in mobile ordering and/or cashierless pickup. *McKinsey*

Campus store/cafe traffic increased **21%** and average transactions grew **23%** in the months after going autonomous. *Chartwells Higher Education Path Forward Survey*

Outside of normal operating hours, students prefer to use self-checkout style or robotic vending option. *NACUFS Campus Dining 2030 and Beyond*



## Healthcare

**22% (one-fourth)** say that automation and technology is the biggest trend in healthcare dining right now, and 9% say they're using it to help them with their labor shortage issues. *FSD's Healthcare Survey*

**71%** of operators indicate that they are likely to invest in replacing equipment, and 68% said they are likely to invest in technology within the next 24 months. *AHF State of the Industry Report*



## Travel & Entertainment

Contactless options popularized by the pandemic will continue to be in-demand. *Lodging Foodservice Report*

Convention centers, arenas, airports, hospitality venues and any other high traffic locations provide opportunities for captive audiences looking for quick and easy access to fresh food.



## Businesses & Institutions

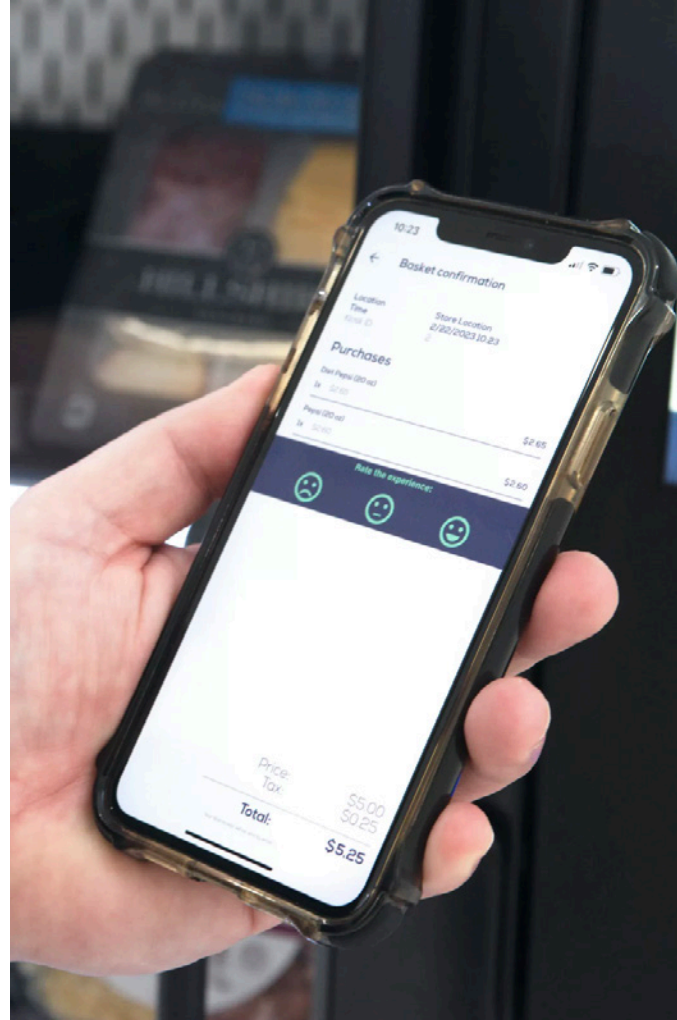
Creating spaces where employees can grab a quick bite and take a coffee break when they need to recharge is a growing trend on business campuses. *The Society for Hospitality and Foodservice Management's Semi-Annual Industry Standards and Benchmark Comparisons Report*

With cost-effectiveness a growing concern, some in-house food service providers and large office cafeteria real estates are too expensive to maintain, especially when employees have embraced more flexible work models. *Cook Unity*

## A Simple Working Process

1. The consumer presents a payment method.
2. Once the payment method is authorized, the door unlocks, and the consumer is free to take the desired items off the various shelves.
3. When satisfied with their selections, the consumer closes the door, and the door instantly locks.
4. If the consumer is done shopping, they can either tap the "Pay" button on the tablet screen or just walk away.

*Market circumstances may dictate the best experience for the consumer. For instance, a Healthcare or B&I environment may require a longer delay to finalize a "walk-away" than a College/University based on security or maturity of the customers. This and other parameters can be set up by the operator for each merchandiser.*



## A Closer Look at ARM

### 1 Security Camera

Directed down to only capture hand making selections; used only to settle disputes.

### 2 Load Cell Trays

Operator programs food in each tray via the App; weight tells systems what's been selected.

### 3 R290 Refrigeration System

Slide-out pan, variable speed compressor, and an on board condensate pan.

### 4 Interactive LED Shelf Lights

Identifies tray that product was selected from & turns red when wrong product is put in a tray.



### 5 Ordering Table Cart/Screen

67% of consumers highlight that contactless experiences are important because they're easy to use.

### 6 Credit Card Terminal

A majority of those who say that contactless experiences are important say it's because they're quick (59%).

### 7 Electronics Box (E-Box)

65% of consumers said privacy was a heightened concern, and they prefer an anonymous/privacy-protected shopping experience.



## Increase Profitability by Lowering Your Total Cost of Ownership with the Autonomous Retail Merchandiser

### Total Cost of Ownership (TCO) Defined

In 2006 NAFEM'S Life Cycle Steering Committee aimed to accomplish this task by developing an Equipment Life Cycle Cost formula and make the results available to those in the industry most affected by TCO.

The association defines TCO, or life cycle cost analysis, as "a method of calculating the cost of ownership of a piece of equipment over its entire useful lifespan."

These costs include the following operating costs and life cycle elements.

#### Operating Costs

- Education & Training
- Preventative Maintenance
- Cost of Procurement & Disposal of Consumables
- Disposal

- Food product loss
- Incremental labor to refill due to product loss
- Fees (Food Tech)

#### Life Cycle Elements

- Equipment Costs
- Purchase Price
- Freight

- Installation & Startup
- Energy Consumption
- Parts & Labor for Repairs

## In Tests Conducted with the Competition, Structural Concepts Outperformed All Models in Key Areas



**Energy**  
40% lower



**Fees**  
54% lower



**Labor Costs**  
85% lower



**Capacity**  
23% higher



**Profitability**  
30% higher



# Expand Your Product Inventory

Experience Unmatched Flexibility and Efficiency with Our Satellite Display Cases to Create the Perfect Autonomous Combination Solution

A versatile addition to your retail setup, allowing operators to **expand their merchandise offerings without incurring additional payment terminal fees.**

This satellite case seamlessly pairs with either Refrigerated or Ambient primary units, offering flexibility and convenience while **maximizing revenue potential** and **increased profitability.**



## Available Configurations

1

### Refrigerated/Refrigerated

Keep your products chilled to perfection.

2

### Refrigerated/Ambient

The perfect blend of freshness and convenience.

3

### Ambient/Ambient

Versatile options for any merchandise.

# Fees

The ARM technology requires connection to the internet and payment processing setup.

Operational fees are associated with payment processing as outlined below.

## Licensing Fee

This allows the operator to utilize the kiosk system platform, covers training, and ongoing technical support. This is what covers the software/brains of the machine.

Operators can choose a fixed OR a variable license fee.

**Fixed fee:** \$100 per month per merchandiser (may increase maximum 5% per year).

**Variable fee:** 4.9% of revenue with a minimum of \$50 per month.

## Closed Loop Fee

This is a fee charged by the closed loop provider and will vary per provider. For example: if the operator uses Transact for their student card payment processing,

Transact may charge an additional couple of points. This is only applicable with declining balance programs.

## Merchant/Interchange Fee

This fee depends on the card (credit card, student card, ...) the consumer uses. This fee is variable and depends on what acquirer is selected by the operator. This fee usually ranges from 2.5% (VISA, Mastercard) to 4.5% (Discover, AMEX).

## Transaction Fee

This is a fee charged by the gateway (the middleware that serves and carries the cardholder data from the terminal to the acquiring bank) to process transactions. Depending on the payment terminal, this can vary from \$0 to \$0.05 per transaction.

## Payment Terminal Fee

Monthly fee for the payment terminal. This fee makes sure that the hardware processes payments. Depending on the terminal, this can vary from \$9.95 to \$15 per month. It is also possible to only process payments through the LOVA APP. In this case, there is no payment terminal fee since there is no additional hardware.

## Cellular Fee

This fee covers the cellular connection if a customer selects the cellular option to connect the merchandiser to the internet. \$10 per month per merchandiser. Alternatively, the ARM can be hard wired to the internet to avoid this fee.

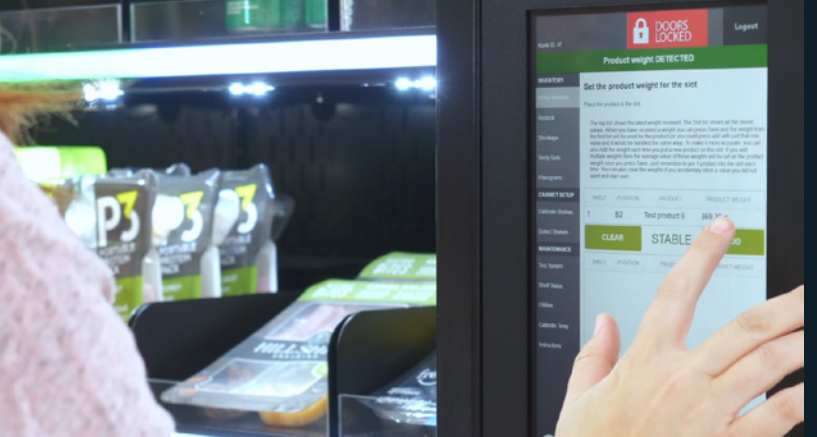
With ARM technology, you can use your merchant of record for payment processing (as shown in the table below) or select SCC's standard configuration, which is Cantaloupe.

With the standard configuration, minimal setup is required to activate an account with Cantaloupe, allowing you to start selling from ARM quicker.

SERVICE TYPE	PAYMENT TERMINAL	REGIONS	AVAILABLE ACQUIRERS	CLOSED LOOP INTEGRATION	FEES
Cantaloupe holds the MID (Merchant of Record Service)	Cantaloupe VP6300 (ePort)	US/Canada	Fiserv	Transact** CBORD Atrium	<ul style="list-style-type: none"> <li>License Fee: 4.9% of revenue OR \$100 per month</li> <li>Transaction Fee: 5.95% (incl. interchange)</li> <li>Closed Loop Fee: between operator and closed loop provider**</li> <li>Payment Terminal Fee: \$9.95/month</li> <li>Interchange fees: incl in transaction fee</li> <li>Cellular fee: \$10/month (optional)</li> </ul>
Bring your own MID (Operator is Merchant of Record and manages own interchange rate with acquirer)	Payter P68	US	Fiserv	N/A	<ul style="list-style-type: none"> <li>License Fee: 4.9% of revenue OR \$100 per month</li> <li>Transaction Fee: 0%</li> <li>Closed Loop Fee: N/A</li> <li>Payment Terminal Fee: \$15/month</li> <li>Interchange fees: fee depends on the payment type. Usually ranges from 2.5% (VISA, Mastercard) to 4.5% (Discover, AMEX).</li> <li>Cellular fee: \$10/month (optional)</li> </ul>
	Adyen (Enterprise level & Canada only)	US/Canada	Adyen	N/A	
	Elevon	US	Elevon	N/A	
	Castles UPT1000F	US	Chase TSYS	Transact** Blackboard Atrium Cbord Touchnet itc Systems	

\* If closed loop is required, End User might be required to send cards to Instant Retail Systems for configuration and testing of the Payment Terminal.

\*\* If using Apriva to process Transact Student Cards and operator does not already have a Transact license (e.g. not the university itself), Transact charges a fee (transactions above \$4: 3.25%; transactions under \$4: 5.25%)



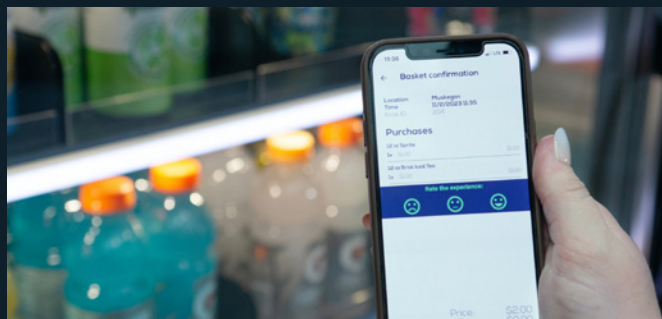
## Stay Relevant in Today's Foodservice Marketplace

**74%** of small and mid-sized businesses expect their customers will continue to prefer contactless payments as much as or more than they do currently.

**66%** believe that automation can improve their shopping experience inclusive of the increasing need for food safety and product consistency.

To combat the increased complexity caused by the labor shortage, **72%** of retailers/sellers of fresh food are using, or planning to use, automation to decrease their team's time on hands-on work.

*Source: McKinsey*



## While Improving the Overall Shopper Experience

### Increased Speed and Accuracy of Transactions

### Ease of Use

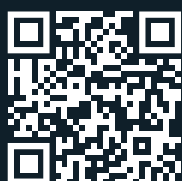
Consumers were twice as likely to choose ease of use (50%) as the most important aspect of contactless experiences over the next option (data security, at 25%).

### Creates Familiarity

When compared to locations that offer little to no automation, automated stores experienced an 11% sales lift among shoppers, as well as an 11% increase in trip frequency.

### Provide a Level of Comfortability

Alleviates shopper concerns by ensuring greater food safety and product consistency.



LEARN MORE

[structuralconcepts.com/arm](https://structuralconcepts.com/arm)  
[product.info@structuralconcepts.com](mailto:product.info@structuralconcepts.com)

**Structural Concepts®**  
 DELIVERING FRESH. ALWAYS.™

© 2024 STRUCTURAL CONCEPTS