

Iris Nova Manages Honor System Beverage Sales

For decades, the non-alcoholic beverage industry has been dominated by sugary drinks sold at high volumes through distribution centers and stores. Next-generation packaged goods company [Iris Nova](#) has a new, different model for bottled drinks, as well as for purchasing via a text message. As the company's unmanned, honor-system beverage sales grow more popular, the company has launched an RFID-based solution to track inventory levels in coolers remotely.

In that way, if someone were to remove a product from the refrigerator shelf, the system would be updated and inventory replenishment requests can go out accordingly. The technology consists of [Avery Dennison](#)'s passive UHF RFID labels on bottles and cans, as well as an RFID reader in the cooler itself, which forwards inventory data to Iris Nova's own software. The system helps the company to ensure that no product goes out of stock, and delivery personnel to more efficiently replenish goods without unnecessary visual checks, according to Zak Normandin, Iris Nova's founder and CEO.



Iris Nova manufactures and sells beverages, such as Dirty Lemon, which feature bottled and canned low-sugar, non-alcoholic drinks. Iris Nova announced an investment in Coca-Cola in December 2018. Since Dirty Lemon debuted in 2015, the company has been offering it as a direct-to-consumer product. That means Iris Nova developed the technology platform that allowed SMS-based orders for Dirty Lemon products.

The Drug Store is Iris Nova's first cashier-less retail site, where beverages on the Iris Nova platform can be purchased. The back of the site includes space for private events and the testing of new beverage concepts before they are developed into bottled products. Two other such sites are scheduled to open this year in Chicago and Los Angeles. Iris Nova also sells products out of coolers at other retailer sites.

The Drug Store utilizes an honor-based purchasing system. Customers can enter the store, remove the beverage they want from the "Grab and Go" cooler and send a text to the company to make a payment. He or she provides debit or credit card

information, and the payment is then conducted without requiring a register or forcing the user to download a phone app.

The system has proven to be popular, Normandin reports. Users frequent the stores and make purchases for the drinks they want, and the rate of theft has been at approximately 5 percent. In other words, the vast majority of consumers stop and pay for the beverages they take. Most customers tend to be millennial women, he says. RFID provides several benefits for a system like this, Normandin notes, as it automates inventory management while collecting historical data about purchasing behavior and provides consumers with another level of service via a screen that displays content related to any items selected.

The company is attaching an Avery Dennison UHF RFID Intelligent Label to each product before it is delivered to The Drug Store. The tag has a unique ID number encoded in it that links to the stock-keeping unit (SKU) data for that product in Iris Nova's software. The cooler is equipped with a UHF RFID reader and antennas to capture all tags stacked inside the cooler at any given time. The cooler then forwards data to the server via an Ethernet connection.



The Avery Dennison tags in use were specially developed to work on metal and products containing liquid, without sacrificing readability, says Julie Vargas, Avery Dennison's head of global RFID market development for food, "so customers can scan them with confidence, enabling self-vending and automated product replenishment."

"The technology is essentially invisible to the consumer," Normandin explains. However, the company can view the real-time status of the cooler, or of other coolers that could be part of the RFID-based network at other sites in the future. Each time a tagged item is removed, the customer can place it

within range of an Apple iPad screen installed by the cooler in order to view details about the product, such as its ingredients and health information.

In the meantime, the inventory software is updated to indicate an item has been removed. When the quantity reaches a minimum threshold, a text message is forwarded automatically to the individual responsible for restocking the cooler so that he or she can replenish that product. The worker can use the software to reduce the number of times he or she must visit the site due to stock levels being insufficient. Previously, employees had to visit the site every morning and evening to check stock levels and replenish goods. Since the system was taken live, Normandin reports, inventory accuracy has been at about 98 percent, which has meant reliable on-shelf availability.

Ultimately, Normandin says, efficiency drives cost savings, and the company plans to expand the system's use to other sites across the country. "We're in retail spaces across the U.S.," he states, with self-serve coolers using the SMS payment method, "and those are the spaces where we might install the RFID technology next." If the system expanded to other stores, he adds, it would then provide inventory updates on a country-wide basis. "We sell in hundreds or thousands of sites. Wherever we put the sensors, we'll be manually applying labels to bottles and cans." Tags will be applied to products at the company's fulfillment centers for products that are placed inside coolers with RFID readers built into them.

Today 12:09 PM

hi! just took a bottle of collagen from the drug store. how do i pay?

Hey

What's your name?

jen smith

Hi Jen 🙌

Follow this link to enter your CC — we'll text to confirm your purchase as soon as you're finished:

drugstore.dirtylemon.com



Looks like you're all set. Your total is **\$10.83** — we'll send a receipt to your email shortly. Let us know if you need anything else x

thanks!!

In the future, RFID could also be used to automatically link a purchase to a particular customer, or to enable the opening of a locked refrigerator. The initial RFID deployment for inventory management may be just the beginning for the company, Normandin says. "This has been a way to validate the value of the technology with the intention of expanding in the future," he states. "We're learning, on a daily basis, of ways the technology could be used... Our whole vision is to apply different processes and technology to optimize the experience for consumers."

The COVID-19 pandemic has made an impact on New York restaurants and other businesses, but the company expects the

need for this beverage-delivery solution to grow for consumers. In fact, Normandin says, "We hope to step up to meet demand" for consumer products. Iris Nova is headquartered in New York, with an office in Los Angeles.