The Connected Store: Putting a Powerful Sales Resource at Your Fingertips

by Vinod Kashyap

For as long as we have known, humans, as shoppers, have purchased items via a transaction with a storekeeper: the green-grocer model. In the late 1800s, the innovation of fixed price labels transformed shopping forever, spawning the new model of the big box store, where shoppers picked out their own products and then paid for them. This model has seen some incremental improvements over the last 120 years, but no real transformations.
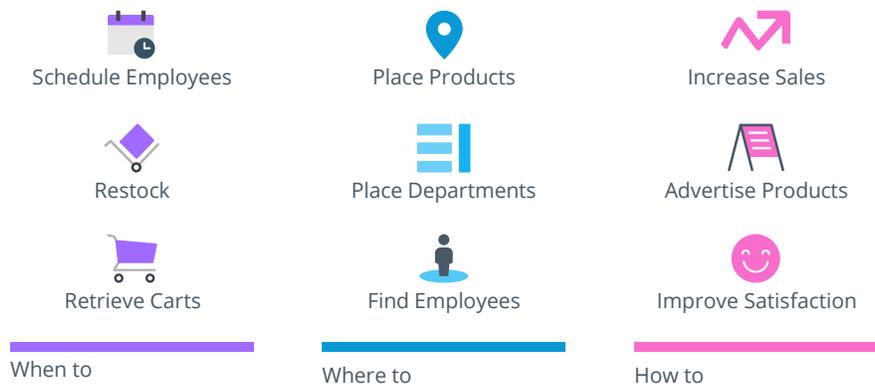
That was until the 1990s, however, when a new shopping model – online shopping – came about, thanks to the Internet, bringing with it profound innovations, including the now-dominating mobile platform.

With this mobile platform, the shopper has taken control. They search, research, choose, pay and ship – all whenever and wherever they want. Still, when they enter a store, they're provided the same level of control as was available 40 years ago; this is where the connected store innovation helps converge the two disparate shopping experiences. Only through a connected store can retailers enable the connected shoppers to take control of their in-store shopping journeys.

What does a connected store do?

The connected store is one where everything – shoppers' mobile devices, shopping carts, store associates' scanners, displays, end caps, etc. – is digitally connected throughout the store, and each thing's location is recognized in real time. Retailers thus get a bird's-eye view of the "where" and "when" of what is happening, moment by moment, on the sales floor.

That connectivity – and its unparalleled location-aware precision – is facilitated by the overhead LED lighting infrastructure, and is an example of Internet of Things, or IoT, capabilities.

Schedule Employees	Place Products	Increase Sales
Restock	Place Departments	Advertise Products
Retrieve Carts	Find Employees	Improve Satisfaction
When to	Where to	How to

In the IoT retail environment, shoppers already connected to the Internet are further connected to the physical store, empowered to take the shopping experience into their own hands – just as they do when shopping online. The "where" and "when" data fed to a retailer's mobile app allows shoppers to access information they've never had before, such as "The product you're looking for (here)," and "the bathroom is (there)." This logic

benefits the retailer, as well, because store associates are able to use their time as product ambassadors vs. traffic controllers.

Such opportunities for using location-based data is where the retailers' ingenuity and creativity come into play; they determine "how" to put IoT into action. Consider:

- Knowing how many shoppers are in the store – by hour and by day – can help retailers schedule the right number of associates in the right sections of the store.
- Receiving alerts when shopping carts are waiting longer than 3 minutes at the check-out counters can allow store managers to open more cash registers in response to heavy demand.
- Seeing where product bottlenecks are created can allow managers to move products out of the way and improve the flow of traffic for shoppers in a rush.
- Connecting store equipment to usage analytics can help minimize failures by providing predictive monitoring and maintenance.

'How' the connected store can revolutionize sales & marketing

One of the most promising aspects of location-based services lies in the advanced marketing it can support. While traditional marketing leads a customer to a retailer's door, it is the connected store – and management ingenuity – that will go a step further to encourage purchase by pushing notifications about a product to an interested consumer already eyeing it.

Unsure of their decision, or thinking the product is available elsewhere or online for less, shoppers might stall a purchase for any number of reasons.

The likelihood of their making the purchase is increased when the shopper's smartphone reveals, in real time, an enticing discount or coupon for the product they're reviewing. Such personalization for a buying opportunity is the mass customization retailers yearn for, and IoT is here to perfect it.

Applications enhanced by location-based services from the connected store will provide retailers access to data that can enhance the customer journey in a much broader way than is done now. Capabilities we expect to be commonplace:

- *Understanding the length of customers' trips throughout the day.* If, for example, during a certain hour most shoppers are focused on quick trips, associates will know to focus on quick answers vs. engaging in product discovery and suggestions.
- *Knowing the in-store journey of shoppers based on their traffic patterns.* They will be able to place highest-value products at the entry points of each specific zone where those products will get the most attention.
- *Correlating foot traffic within a specific store department with that department's sales.* Retailers will be able to identify what hours that department is simply a "showroom" vs. an active sales floor.

In today's growing RIoT industry, new contributors are forming every day to assist retailers in tapping the potential to benefit both shoppers and their own operations. They are the players who will help retailers take the "where" and "when" data and make extraordinary deployments in "how" it is used.

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