

View Point



Real World Awareness:

Finally, a 360 degree View of the Shopping Trip

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Abstract

Creating real world awareness in a brick-and-mortar location could bring enormous benefits to everyone—retailers, CPG manufacturers and shoppers. Timely knowledge of shopper movement and shelf activity can help retailers and CPG manufacturers take informed decisions to ensure shoppers have the products where, when and the way they want it.

Infosys' ShoppingTrip360 is an information ecosystem which helps shoppers, retailers and CPG manufacturers to collaboratively achieve real world awareness, and leverage its benefits to individual and collective competitive advantage.

Let's say you were comparing two retailers' ability to measure shopper behavior. One is a traditional brick-and-mortar store, the other a purely online retailer. Both are equally capable of measuring [what](#) their customers buy, and both can determine [who](#) their customers are. In fact, if the brick-and-mortar retailer has a long-standing loyalty program, it may even have an advantage in this area.

But when it comes to measuring [how](#) their customers shop—learning exactly what converts a shopper's intention to buy into an actual purchase—the online retailer has a clear advantage over his physical-world competitor. From the moment a prospective customer lands at a website, online retailers have visibility into every “click” that leads up to a purchase. That's because the web page is an active environment: a shopper can get more product detail, compare it with similar products, look for deals and promotions, access user feedback and reviews and even look up complementary products.

By measuring not just what shoppers ultimately buy but how they shop, online retailers can gauge the effectiveness of their merchandising, marketing, and promotional strategies, as well as the tools used to execute those strategies.

Creating this same level of [real world awareness](#) in a brick-and-mortar location could bring enormous benefits to everyone—retailers, CPG manufacturers and shoppers. Empowering customers with easy access to information could make the shopping experience richer. Timely knowledge of shopper movement and shelf activity is extremely valuable to both retailers and CPG manufacturers, and timely actions based on this information could be equally valuable to shoppers—providing them with the products they want, when and where they want them.

Can Real World Awareness Be Cost-Effective in the Brick-and-Mortar World?

While the value of such information is quite apparent, the challenge has been to cost-effectively get fine-grained visibility to business events in a physical retail location, achieving it with the same ease and flexibility that's possible in the online world. There have been several endeavors in this direction that enterprises have embarked upon to achieve such [real world awareness](#). All these solutions prove the value of timely visibility, but they have not necessarily been economically viable owing to the high costs of point solutions.

Perhaps it is time to look at the cost equation differently.

In the context of the consumer retail value chain, real world awareness would be valuable to more than one entity. For example, information about in-store shopper concentrations that a retailer uses for operational excellence can be equally useful for a CPG brand to plan in-store marketing. Intelligent shelves that help retailers achieve higher shelf throughput could help CPG manufacturers better execute promotional events. Shopper loyalty programs can also help CPG manufacturers, influencing shoppers with targeted promotions and deals. And of course all this involves different degrees of shopper participation, with benefits in the form of better products, cost savings and an enhanced shopping experience.

Information Ecosystems: Distributing Benefits All Around

An information ecosystem could be a way for shoppers, retailers and CPG manufacturers to collaboratively achieve real world awareness, and leverage its benefits to individual and collective competitive advantage.

Infosys' ShoppingTrip360 (ST360) is an information service for consumer retail that is modeled on such thinking. The solution leverages a common infrastructure that enables multiple real world-aware applications, and it is offered using a unique business model that supports sharing of costs and benefits.

The solution is based on a network of tiny wireless sensors in the store, enabling an active and aware environment to support a number of applications. “Active” because the shopper actively engages with the store environment. “Aware” because the retailer and CPG manufacturers are finally aware of shopper and shelf activity. Many of these applications are already in pilot or deployed in retail locations around the globe. Below is just a sample of the various types of applications available:

- Shopper location awareness is established with the in-store heat map, a ST360 application that tracks shopping paths using tiny sensors on shopping carts, providing a real-time view of shoppers' paths and their concentrations in the store. The retailer uses this information to know when to open more check-out lanes, to ensure shoppers don't end up in long lines. When combined with scan data collected at the point of sale, this same information can help improve merchandising and product placement decisions.
- A smart shelf pad is a ST360 appliance, powered by ambient light, that helps reduce shelf-level stock outs on promotional and high velocity items without the need for item-level RFID tags. When products are both in stock

and placed correctly, customers find it more convenient to shop. CPG manufacturers always aspire to better product placement and superior retail execution (especially on new and promotional merchandise), and they would pay a premium for this opportunity.

- A shopper concierge service is a ST360 application that customers can install for free on a regular cell phone, using it to organize their shopping lists and receive targeted promotional offers. This is a permission-based service operating in an on demand information pull model. Shoppers can clip recipes on the Internet and retrieve them on their cell phone while shopping in the store. They could also get recommendations on a matching wine, with a personalized promotional offer that could be redeemed electronically. CPG manufacturers find this to be a very effective way to connect and influence shoppers at the point of relevance, and would be willing to pay for such an opportunity.

A Unique Economic Model

These are just a few examples of the many applications that such an information ecosystem could support—all of them providing benefits for shoppers, retailers, and CPG manufacturers. On the costs side of the equation, Infosys participates in this ecosystem through a full investment in the ST360 network infrastructure that facilitates these interactions, and offers information services in a subscription model, with prices based on business outcomes.

Akin to natural ecosystems, which thrive on the basis of symbiotic relationships among participant species without necessarily compromising individual advantages, ShoppingTrip360 could be the model that supports such a beneficial premise in the consumer retail industry.



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