CONNECTING THE DOTS: *How to make years of investment in retail technology pay off ?*

Today's stores are buzzing with technology. Scanners, digital signage, digital displays, kiosks, tablets, hand held devices, POS, RFID and inventory systems are working in silos. How does a retailer bring all these investments together, map it to customer needs, and ensure an ecosystem that drives real-time customer engagement?

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Beam me an offer, Scotty: influencing customers

It may seem that most retail stores have been built the wrong way. It is only when a customer has finished shopping and is checking out, does the store know who the customer is. Using credit card and loyalty card details, the store finally figures the customer's name, rudimentary purchase history and the actual 'size of basket'. At this point, all the store can tempt the customer with is an additional pack of bubble gum or a magazine. It is too late to do anything else. By contrast, online customers tend to first log in and allow every action to be tracked. Now brick-and-mortar stores can also get to know customer details before the first purchase is made. This presents an exciting new opportunity, making it

work for them, instead of moping that customers are 'showrooming' – the practice of purchasing items online from within a store using a smartphone after finding better prices online.

The reality is that as many as 80% of shoppers still visit stores.[1] The question is, "Can these shoppers be influenced by connecting devices within the store?"

Using mobile technology to recognize the customer, retailers can ensure greater predictability in shopping outcomes. A large retail chain in the US found that a one point improvement for in-store close rates translated into US$200 million in incremental operating income[2] . That kind of gain can be real for most retailers. What retailers need to put in place is a well-thought out connected device ecosystem. Such an ecosystem nudges customers towards buying more by beaming offers that are beneficial to customers.

irrelevant to depend on check outs for trivial increase in sales.

For several years now, retailers have built a formidable arsenal of in-store information display systems. These include digital signage, flat screen TVs, kiosks, interactive POS and store associates armed with tablets. For the last few years retailers have been busy investing in mobile applications that help connect with the customer. More recently they have placed their bets on increasing their social conversations. Now, it is time to tie all this together and begin a seamless, personal, insightful, fun-filled, and rewarding conversation with the customer. It is time to make smartphones and other intelligent devices

Starting the connected device conversation: recognizing the customer

The crucial element in recognizing the customer and creating a personalized experience begins by ensuring the customer is persuaded to download a store app to their mobile device. This can be done by permitting the app download over the store Wi-Fi, over Bluetooth or NFC.

Several retailers have begun to target customers, making them offers as they pass by the vicinity of the store. Starbucks, for example, inserts a 'passport' into the customer's smartphone. When the customer is driving

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past, the application recognizes the customer, maps the customer to data from internal and external sources to throw up offers that are immediately useful or those that fuel the customer's curiosity. The practice is sometimes referred to as geo-fencing.

In-store sensors can use the same application to track customers as they walk through the store. But this is not necessarily the only way to track customers. Customers can be asked to tap their phones against sensors at the entrance, use facial recognition to be instantly identified or simply be persuaded to login through a kiosk at the store before shopping. Now the store knows the customer, the customer's mobile number, unique loyalty ID, email ID, past shopping history, CRM interactions, social exchanges etc. Armed with this information, the store can begin to personalize the shopping experience.

Handy Helpers: providing what the customer needs
There is little point in carpet bombing customers with coupons, offers and promotions. Instead, using customer data, carefully personalized promotions, product information, reviews, product comparisons, pricing and Stock Keeping Units (SKUs) are pushed out to the customer over the mobile device.

The ecosystem built around the customer's mobile device and in-store systems plays an important role is keeping the conversation alive. It is here that the store assistant's mobile device (preferably a tablet) begins to play a pivotal role. The store assistant's device must be equipped with data on the customer (wish list, likes/ dislikes, etc.), their social conversations, general consumer trends, products in stock, in-store availability (inventory levels), real-time pricing, competitive pricing, on-going promotions, reward and loyalty program details. The data helps the store associate instantly personalize the experience, match prices, offer loyalty points and convert the conversation into a sale.

When a customer needs assistance or is unable to find a product, the store assistant should become the handy helper with immediate assistance. This requires:

• Customer location accessibility
• Real time price update on aisles with electronic shelf labels
• Pricing and product benefits pushed to the customer's device
• Ability to point customer to the product using product location mapping
• If the product is not in the store, ability to locate it in the inventory on the store assistant's device and make the product available
• If the product is not in the store inventory, ability to locate it in another store in close proximity on the store assistant's device and get it delivered to the customer

The idea is to have an endless aisle by integrating infrastructure across stores. Regardless of the customer's needs, there should be a way of fulfilling it. For this to happen, data maintained in silos needs to be brought out and into play; systems must be integrated to share information in real-time and analytics engines must deliver actionable insight to customers and store assistants anywhere within the store.

Going the extra mile: enhancing customer experience
The connected device ecosystem can be used to magnify the effect of the one-on-one engagement. Self-help kiosks, digital signage, digital displays, hand held devices with store associates and even the POS can be used to show promotions, real-life videos, interactive displays, real-time pricing, purchase patterns of other similar shoppers, social activity on products, etc. These have been known to improve sales several folds. One study on the use of digital signage across a hardware retail chain in North America showed sales of interior paint improve by 23% and air filters by a staggering 178%[3].

Handy Helpers: providing what the customer needs
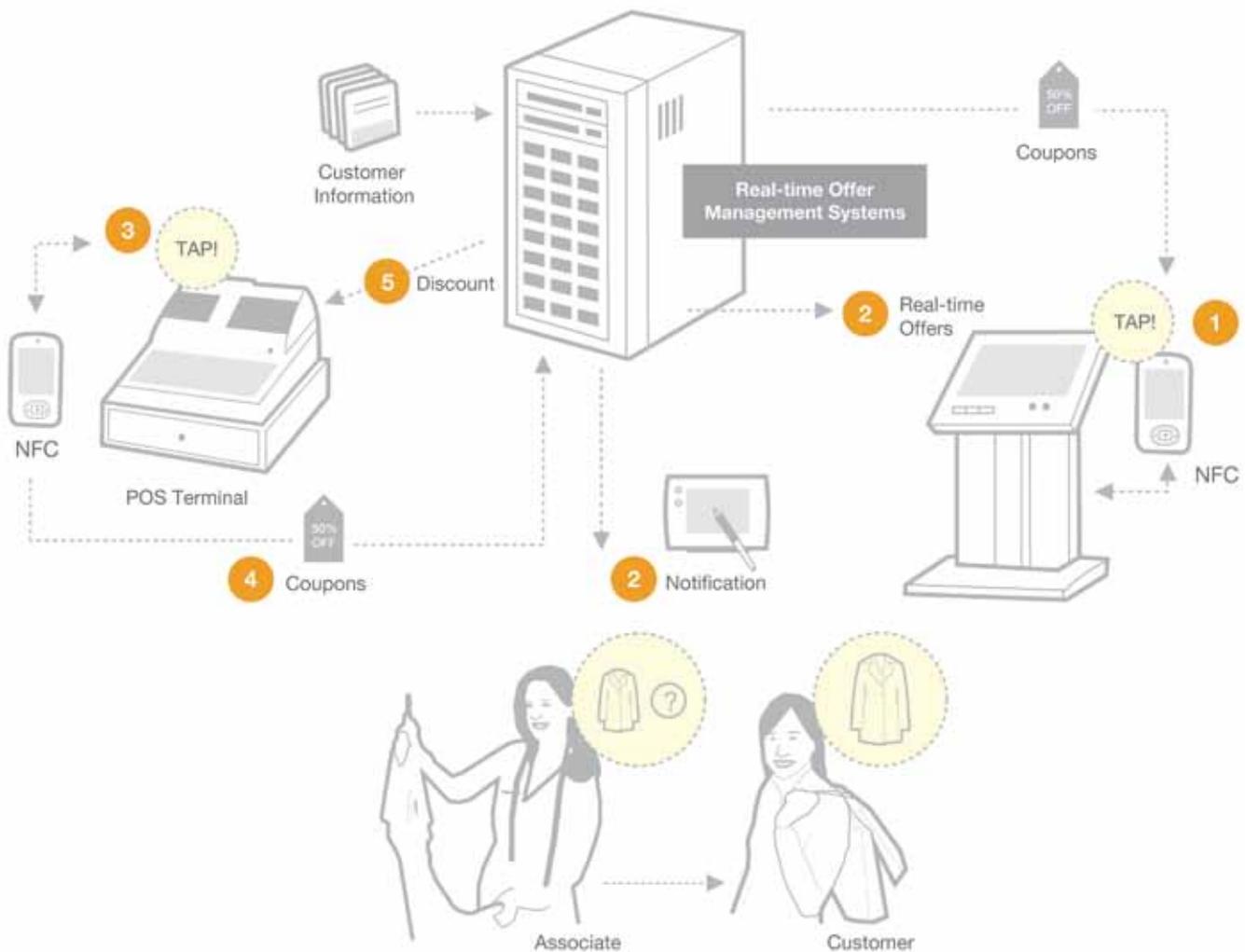
The ecosystem can be additionally deployed to enhance branding. Stores may have a variety of community service programs, customer-focused events, awards, recognition and industry leadership standards that may be explained to customers using the displays. These can be customized to ensure that only the relevant information is shown, based on customer profile and segmentation. (As an example, the value of showing a promotion for an event calling for children to participate may have limited value if the customer does not have children).

If the customer is showrooming, a store associate can help the customer find product matches. Studies show that at this point the product price can also be a little higher than what the customer finds online.

The customer will still buy[4]. Price is not always the most important factor – elements such as convenience, incentives that combine promotions and loyalty rewards play a major role in the decision to buy at a marginally high price.

The final link in the chain: getting it right at check out
Does your customer abandon the cart because of long checkout lines? That's simple enough to solve by dynamically opening POS counters or sending customers to self-check outs using video analytics of checkout lines. But we know that customers hate to wait. Modern queue busting technology takes care of this, improving store employee productivity along the way:

• **Hand held scanners:** Products in the cart can be scanned by store associates using a hand held device. Billing is complete before the customer reaches the POS. Payment is made at the POS in the traditional way.

• **In-aisle scanners:** Customers are handed wireless scanners when they step into the store. These are to scan the items being placed in the cart. Payment is made at the POS or at a self-checkout counter (tied to RFID technology).

• **Multi product scanners:** The entire basket can be scanned and billed in a single scan using RFID technology at the POS.

• **Hand held POS:** This device has complete POS functionality and can also accept payment, enabling billing within the store. The transaction can be closed at the hand held POS.

Many of these solutions have the additional benefit of reducing shrinkage, a major loss faced by retailers.

Today's POS terminals can also be linked to inventory,

CRM systems and customer data. As store devices talk to each other, they can ensure that an increasing amount of customer data is captured and leveraged.

When the ecosystem is combined with newer payment methods such as contactless NFC payment or one click mobile wallet payment, cart abandonment can be significantly reduced.

The future is here: and the consumer wants to shake hands with it

Retailers are increasingly linking years of their investments in technology for better results. As a consequence, stores are getting smarter at recognizing, tracking and talking to customers. They are also getting intelligent thanks to the availability of data. The end result is better experience, service, loyalty and conversions.

The signs of this trend are around us. Several retailers have started following a self-regulatory code when tracking customers over their Wi-Fi networks. They are setting up signage within the store that makes customers aware they are being tracked[5] . Stores know they must respect customer privacy at all cost. But they also understand that customers are willing to share personal information with those they trust in exchange for value. Retailers who bring this value through a connected device ecosystem will see customers returning to their doors.

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