Five Things Retailers Should Know About Proximity Solutions

By Thomas Kurukootjohn, UST Global Retail — August 25, 2015

About 15% of today’s retailers use what are called “proximity solutions”—technologies such as geo-fencing and iBeacons, which sense when customers are within a certain location or area and enable interactions between the retailer and the customer via the customer’s smartphone. Judging from related examples of location technology such as global positioning system (GPS)-enabled smartphones, this percentage is likely to reach 60% within five years.

Innovative retailers will work to connect with modern customers—customers who expect a high level of engagement and tailored information from their shopping experience. With advances in technology including near field communication (NFC), which permits devices to trade information wirelessly (think of tapping your credit card to a reader), and Bluetooth low energy (BLE), which enables the same wireless communication range as a standard Bluetooth network but requires much less power. Retailers finally have the capability to meet customer demand—and impress them with more accurate targeting.

Here are five things retailers need to know about proximity-based solutions:

1. Geo-fencing is a virtual fence of information created around a real-world geographical area. This is the foundation of proximity-based services. Once users enter the designated area, promotions and messages can be sent to their compatible mobile devices to evoke interest and create a possible buying opportunity. Geo-fencing becomes geo-targeting when hyper-local deals, not just general information, are pushed to mobile devices (offering deals at a nearby flower shop when a customer makes a purchase at a mall jewelry store, for example). The key to success for these initiatives is to make them value-additive rather than intrusive: the same customers who may feel apprehensive about push notifications may welcome geo-fencing when the store they want to visit has moved and they are automatically informed about its new location. According to a Mobile Marketer article, clothing retailer Ashley Stewart is using geo-fencing to direct its customers from their closed stores to the nearest open one. In fact, the company is even trying to poach customers from competitors’ stores—a practice nicknamed “geo-conquesting.”[1]

2. iBeacons, small wireless sensors that transmit data to compatible Bluetooth devices, operate under the BLE standard (they don’t need a wi-fi network) and require only a tiny battery for use. ABI research indicates that in the next few years, the number of BLE beacons will exceed 60 million.[2] One of the best uses of iBeacons is micro-location—identifying the position of objects within confined spaces where GPS signals are not available like the ground floor of a multi-level store. Using simple triangulation of data from multiple beacons, a customer position can be mapped to an aisle or near a specific product. Data from BLE beacons can be used to approximate when customers enter or exit a store, or when they are lingering near a designated region. These sensors could be used to design contextually aware applications including targeted promotions, effective product information, and even better store layouts. Very simple to install, but UST is useful for creating platforms for each retailers’ use.

3. Micro-location is the term for identifying shopper location and providing navigation services to direct users to a specific location. Micro-location is not just for sending information to the customer, though; finding out where customers linger can help retailers zero in on hotspots and hone in-place promotions to increase sales. Identifying add-ons to existing shopping carts or promotions for low-volume areas are other possible applications of micro-location.

4. Real-World Case Studies

The South Korea branch of the grocery and convenience store retailer Tesco sought to become number one in its national market—without incurring the costs associated with increasing its number of stores. To accomplish their goal, they put proximity based services to work: they created virtual stores in places like railway stations, airports, and other transportation hubs, reaching out to...
customers who were in a hurry. They then launched a
campaign to inform these busy potential customers
about their ultra-convenient shopping. With minimal
expense for its virtual stores and a well-thought-out
backend distribution system, Tesco reached its goal.

At a different large, international retailer, UST Global
worked with the head of innovation at their virtual lab
to make checkout more seamless. Capitalizing on the
contactless interface enabled by NFC, the company
was able to replace the onerous scanning of bar codes
with simple product sensing—speeding up the
checkout process immensely.

While bigger retailers with larger locations have the
space and resources to implement proximity-based
solutions, will this technology be affordable and useful
to smaller retailers, too? The answer appears to be
yes: smaller chains such as gas stations have already
inquired about micro-location platforms for their
stores. Moreover, the infrastructure involved is
minimal: installation of iBeacons is extremely simple
and its network demands minor; additionally, the cost
for these devices is highly likely to decrease, as it has
most high technology.

5. Future Applications: Data Analytics
While the present applications of these solutions are
gear toward immediate sales, the future is in data
analytics. The qualitative data to be collected from
millions of customer/store interactions and
experiences on the ground could motivate major
innovations in retailer design, promotions, marketing,
and inventory.

The contact enabled by geo-fencing and BLE devices is
relevant and comfortable for the millennial
demographic, who are at home with social media, and
the latest technology. Baby Boomers and Generation X
may be more wary about retailers encroaching on their
privacy. Retailers may have to be sensitive to these
cultural distinctions, and tailor their practices
accordingly.

Generation aside, though, any “smart” customer today
wants a personalized retail experience, and the smart
retailers are the ones who deliver it.