



## IDC PERSPECTIVE

# Quinnox iBeacon Technology Platform; Empowering Customer Journey

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## EXECUTIVE SNAPSHOT

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### FIGURE 1

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## Executive Snapshot: Quinnox iBeacon Technology Platform — Empowering the Customer's Journey

This IDC Retail Insights Perspective discusses the Quinnox iBeacon technology platform called "QSense." QSense provides location-based capabilities, enabling retailers to gain insights about customers' shopping behavior. Location-based technology offers tremendous growth potential to retailers by driving foot traffic and increasing basket size.

### Key Takeaways

- Today, digitally connected shoppers expect a true omni-channel experience at every touch point and find the right information at the right time and the right location.
- The QSense iBeacon technology platform opens up new revenue streams for brick-and-mortar retailers by collecting relevant data to provide direct-to-customer communications that improve the customer experience and customer retention rate.
- One of the key benefits of location-based technology in an omni-channel retail environment is identifying the path customers take to reach specific sections within the retail store.
- The important role of location-based technology can enhance the customer experience and shopping journey by providing the exact location of the product within the store environment.

### Recommended Actions

- Channel partners need to build added-value services when reselling cloud solutions through the associated consulting services or the ability to build a hybrid cloud environment for end customers. Ideally, the cloud channel partner should create its own intellectual property to prevent dependency on the cloud service providers' decisions.
- Become a digital influencer, not only where there is a deep understanding of the technology, but also where technology can be used to transform the customer's industry or business. In the end, the channel partner should be considered a trusted cloud/digital partner.
- Expand business networking in line-of-business areas (marketing, sales, operations, human resources, and so forth) with the purpose of building a long-term relationship through the understanding of channel partners' needs and the creation of innovation platforms with technology.

Source: IDC, 2017

## SITUATION OVERVIEW

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This IDC Retail Insights Perspective discusses the Quinnox iBeacon technology platform called "QSense." QSense provides location-based capabilities, enabling retailers to gain insights about a customer's shopping behavior. The growth of digital commerce, demographic changes, and mobile applications have fueled the growth of the retail industry. Today, shoppers use their smartphones, tablets, and other devices to access the internet and search and compare products prior to purchase. These "digitally connected" customers also want consistency at every touch point, giving way to what we call omni-channel retail. With the rise of the smartphone and beacon technology, location-based technology adoption in retail has seen tremendous growth, enabling retailers to interact and engage consumers in real time in the physical and digital spaces. The iBeacon technology of QSense can be read directly from any standard tablet or smartphone, eliminating the need for handheld readers.

In today's highly competitive omni-channel marketplace, retailers' key differentiator is happy customers, and customer experience initiatives are overwhelmingly regarded as strategic initiatives, (*IDC's 2015 EXPERIENCES Survey: Customer Experience Professionals Are Strategic, Not Just a Buzzword*, IDC #256893, June 2015). As part of their customer engagement focus, retailers are investing in customer-facing technologies, developing smartphone apps, leveraging social media sites, and reinventing their stores to become fulfillment centers. However, as retailers race to update their physical and virtual front doors to attract today's increasingly discerning and empowered shoppers, the reality is that retail business leaders are equally challenged to understand their customers' shopping behaviors. To draw customers to their brick-and-mortar locations and gain valuable insights into shoppers' behaviors, many retailers are turning to new technology, such as beacons, to enhance their in-store experience.

Wherever there is a digital touch point, in-store, in public, or at home, there is an opportunity to use internet of things (IoT) technologies. IDC defines IoT as a wired or wireless network that connects devices or "things" that are characterized by autonomous provisioning, management, monitoring, and communication. For retailers, IoT presents an opportunity to gather and respond to valuable data about shopper preferences as well as service and availability levels. This insight can then be used to support initiatives that can improve customer engagement, retention, and loyalty.

### Paradigm Shift

The shopping experience in retail is changing as new technologies allow customers to a closer look at the product that satisfies their needs before purchasing it. The convergence of brick and click has forced retailers to redesign their retail sales channel strategies and has shifted the balance of power in favor of the consumers. Consumers expect the immediacy of digital media to carry through the entire shopping experience and are now looking for their next "best experience." Retailers need perform end-to-end reviews of their current business processes and engage the customer at every touch point to ensure offering customers their next "best experience."

Location-based marketing enables retailers to better leverage their wireless networks to engage with always-connected customers. It also offers tremendous growth potential as it meets three concurrent objectives:

- Improve customer engagement and drive foot traffic
- Increase basket size and grow sales
- Improve ROI on enterprise wireless network investment

Location-based services (LBS) use various wireless connectivity options to pinpoint customer location and collect relevant data to provide direct-to-customer communications that improve customer experience and customer retention rate. Retailers have already experienced some of the opportunities that LBS can provide, such as customer insights and improved efficiency. For instance, some retail brands use LBS applications that measure the number of times and repeat visits of a customer in a particular department or section within the store. For customers repeatedly spending an extensive amount of time in a certain section, they may receive on their smartphone, enabled by LBS, a push notification for a special offer. In addition, LBS can provide navigational assistance in a larger shopping environment as well as other context-based communications and services. The benefit to the enterprise is multidimensional — push notifications create short-term opportunities to increase customer satisfaction and engagement, whereas the analytics that can be generated can be used for long-term customer strategy and improve customer relationship management (CRM) efforts.

LBS enable retailers to create zones for every area on the premises, deciding what offers, deals, and product details should be shown on customers' smartphones as they enter each zone. When the customers are shopping, the mobile app tracks user movements, such as footfall, dwell time, path taken, and more, and provide retailers with detailed analytics. These can provide valuable insights into the shoppers' behavior, personalized offers and deals, how customers should be greeted at the store, and other factors that influence in-store experience. Retail marketers can now leverage real-time data to better target consumers based on where they go, effectively measure how digital ads drive footfall into stores, and even connect consumer journey from ads exposure to store visit to purchase data.

## How QSense Works

QSense uses iBeacon devices to provide location-based information. The iBeacon devices work on the Bluetooth low energy (BLE) concept designed for low energy consumption and cost while maintaining a communication range similar to standard Bluetooth's. Once shoppers are in a store, retailers can use QSense to draw those potential customers to specific merchandise on the shelves by leveraging the beacon technology. On the server side, the beacon maps location-specific content. Merchandise and promotion information is displayed on the customers' mobile app. One of the key features that have been incorporated in the QSense is Popular Path. It helps the retailer identify the path that customers are taking to reach specific sections within the retail store. Popular Path enables the retailer to gain insights of customers' movement within the store, time spent in each section (dwell time), and possible interest in specific merchandise items. The insights provide an opportunity for retailers to cross-sell and upsell merchandise based on customer interest and help retailers strategically display and place merchandise within the store. Retailers can also send targeted, timely, and personalized offers directly to consumers' smartphones.

FIGURE 2

QSense iBeacon in Retail Store



Source: IDC, 2017

## How Retailers Can Put QSense To Use

There are seven ways Qsense can help retailers increase sales from their physical locations

### *Queue Busting*

Waiting in long queues to check out is the last thing any shopper wants to do. Because of rising costs associated with supporting multiple checkout lanes, many retailers are rightsizing their point-of-sale (POS) environments to handle normal sales traffic. However, during peak shopping periods, this optimization can run the risk of leaving customers with poor service and/or result in the possible loss of sales. Queue busting provides retailers with an excellent option for managing periodic demands on the front end without the need to open extra checkout lanes. Customers welcome the ability to move through the checkout process more quickly and appreciate the personal attention, increasing their overall satisfaction with the experience.

With QSense, customers can scan selected items, and once the shopping is completed, the customer receives a "check out" push notification from the retailer's mobile app. The push notification shows the items selected, total amount pending payment, and confirmation request. They don't have to wait in a queue, and the app can retrieve their personal details from the time they entered the retail store. As soon as they walk into the store, within the range of the beacon placed there, they are recognized, and a message is triggered to their phones through the app, giving customers a great, hassle-free experience as soon as they enter the store. The whole process is seamless and hassle-free.

### ***Product Finding and Indoor Navigation***

Digitally mapping the retail store helps in understanding the store layout better. It also helps customers locate products easily in the store. This map needs to be constantly updated to reflect precise data at any given point in time. QSense provides navigation and finds the exact location of the product in the retail store, helping shoppers navigate and interact with specific geofenced regions through mobile apps using beacon technology. QSense can also determine the location of shoppers in a shopping environment and provide them with directions to find the right product. Indoor navigation can also be used to build an interactive tour of a retail store or a shopping mall. Using QSense, retailers can provide customers with virtual maps and turn-by-turn directions to their favorite section inside the retail store.

### ***Customer Engagement Enhancement***

By connecting beacons to digital signage, retailers can provide customers with new product information as well as downloadable vouchers and discount promotions. Several big-name retailers have found success with beacon deployments, including Oscar Mayer, Target, and Macy's, which is expanding beacon technology to all its stores, for a total of 4,000 beacons, after successful testing the technology in some large markets. These brands are taking advantage of the propensity of consumers to use their smartphones and wearable technology while shopping. According to IDC, 46% of consumers use retail mobile apps on a weekly basis to download coupons, look for competitive pricing, find product specs, warranty information and other product details, and even pay for their purchases when available.

### ***Customer Service***

The beacon inside the retail store is aware customers are in the store. The app in their device is aware of their product choices and other preferences. Through the mobile app, the retailer can trigger a message asking them to "check out the latest promotions." The customers can then have a look at the promotions, watch a video of the product, and view other related offers. Once they have made their decision, they can place the order in the app.

### ***Loyalty Programs***

Retailers can use QSense to present guests with a broadcast of "location-specific offers." Using beacons, the retailer can define targeted "microlocations" to trigger an alert, an offer, or a special discount for a loyal customer already in the store. Using beacons, the retailer will be able to customize promotions to specific locations in the store premises and send shoppers the right message. Instead of blindly sending discount coupons when customers walk into a store, they would only receive context-specific coupons and offers when approaching specific areas of the store they're interested in. A consumer's choice of categories is given the utmost importance in this case, or only the right offers are presented through predictive analytics based on the information the retailer has (via the mobile app) on the customer's number of store visits, interests, past orders, and so forth.

## ***Upsell and Cross-Sell***

Beacons can be used to cross-sell products to customers. The retailer can send welcome notifications and offer discounted offers at the exact time and place that customer most likely wants to pay for a product. The retailer can also use QSense to upsell to customers. If a customer spends a considerable amount of time near an exhibit (known as dwell time), the retailer can recommend similar items that can be purchased at the shop. The retailer can also remind guests to buy some limited offer merchandise. Similarly, when customers are near the store area, the retailer can suggest the most popular product or a combination of products that they can order. This is a win-win situation for both the customers and the retailer — the customers get personalized messages they find engaging and the retailer can generate more revenue.

## ***Analytics***

In addition to the benefits of digital coupons, product information, and proximity-based offers that beacons provide to consumers to enhance their in-store experiences, they also provide retailers with important consumer intelligence information, such as how long customers stopped at beacon-enabled displays, the relationship between beacon-enabled sales offers and actual sales, and similar information that can be analyzed to adjust offers as well as staffing and placement of sales associates. These insights will enable retailers to drive better revenue and profits from their brick-and-mortar locations.

When retailers use innovative technology, such as beacons, to find new ways to engage with their customers, they're creating personalized shopping experiences that draw in new consumers and give loyal shoppers a reason to keep coming back.

## ***Customer Insights Gain***

Beacons can be used for gathering data to gain insights into customer behavior and use that data to improve the overall guest experience. Beacons can also be used to measure dwell times, finding out how much time shoppers spend at different locations of the store or which areas of the retail store are the most popular with customers. By outfitting retail stores with beacons, retailers can identify the profit centers and time spent by guests in those centers. They can also measure the concentration of customers at a specific time of the day and plan offers and rewards accordingly.

## ***Staff Productivity***

Beacons can also log the presence of shopkeepers and sales associates, removing the need for paper-based records. Alerts can also be sent if specific areas have not been serviced per schedule. The retailer can also use dwell time to generate analytics on how long different activities take and use them to measure productivity or adjust schedules to maximize the productivity of the workforces. Using information from beacons, the retailer can find which fitting room is ready to be used by another customer without disturbing the customer.

## **ADVICE FOR THE TECHNOLOGY BUYER**

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Retailers that have already aligned inventory data with contextualized information about their customers are best positioned to take advantage of beacons' trends in the short term to midterm. In contrast, retailers that have yet to align can still gain from embarking on the journey to get the right foundations in place to facilitate such alignment. Considering the majority of retailers believe that funding of the initial investments at the scale needed is the number 1 barrier to adoption, the guidance

in this and other related IDC research is consistent. A retailer needs to examine the ROI of various consumer-facing use cases in the context of relevance, time to market, and resource requirements (including emerging technology standards) on a case-to-case basis, allowing the retailer to fail small and fast and concentrate on translating the lessons learned from more successful pilots. General strategic advice for retailers that want to invest in beacon-related projects breaks down into four steps:

- Assess and ensure existing underlying ICT infrastructure is fit for its purpose (e.g., facilitating wireless communication requirements). A robust, updated, and well-proven WLAN infrastructure is necessary for a successful LBS deployment.
- Engage and choose an LBS solution vendor that understands the retail business processes and is able to align solutions to existing omni-channel business strategies as well as customer experience trends and initiatives.
- Initiate small, iterative pilots for rapid results and faster deployment. Evaluate whether enhancements are needed for wireless data security infrastructure.
- Ensure the IoT project supports the best customer experience and more convenient, digitally enabled shopping journeys for the most loyal consumers.

It is also important to note that IT vendors looking to successfully meet this demand in the long term should be able to demonstrate a good understanding of the IT interdependencies required to harness the benefits of IoT technologies within the retail sector. Their specialist integration services and partner ecosystems should also support the complex nature of current deployments. In addition, vendors need to understand the retailer's security concern in case a breach leaves customer data exposed. As businesses strive for differentiation, retailers need to invest in proprietary mobile applications to enhance customer engagement and brand visibility.

In conclusion, the most successful IoT investments will support:

- Better customer service, support, and overall customer engagement
- Customer acquisition and retention
- Product and/or service improvement and innovation
- Business process efficiency/operations optimisation and control
- Lower operational costs

## LEARN MORE

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### Related Research

- *WLAN Location-Based Services: Delivering a More Connected Customer Experience* (IDC #US40270815, December 2015)
- *Perspective: IoT, Beacon, and NFC Developments for Effective Customer Engagement* (IDC #GIPW51X, January 2015)

### Synopsis

This IDC Retail Insights Perspective discusses the importance of location-based technology platform and its potential benefits to brick and mortar retail environment. Specifically, it discusses the Quinnox iBeacon technology platform, which enables retailers to drive foot traffic, increase basket size, and gain customer insights. This study also shares essential guidance for retail enterprises to best reap the benefits of rapidly emerging beacon application.

"In a world in which customers are always connected through mobile devices, location-based technology enables retailers to engage their customers in real time. At the same time, this technology is part of a greater recognition that the network can create new business opportunities and empower innovation in customer engagement and shopping journey," says Mike Ghasemi, research director, IDC Retail Insights, Asia/Pacific.

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