



What's New in Smart Retail

Insights from Retail Technology Leaders



rainus

Ziide®

Quuppa

According to “The State of Retail 2017” by TimeTrade, three out of four consumers state they prefer shopping in a physical store where – for instance – they can feel the fabrics, compare the freshness of produce, and check inventory availability in different sizes and colors. Yet, online shopping continues to grow in popularity, putting pressure on in-store retailers to compete for shoppers by improving the customer’s in-store experience.

Enter smart retail, an omnichannel strategy to increase customer loyalty and retention by providing a seamless in-store customer experience. As part of this experience, the customer is offered consistent pricing, promotional offers, personalized communications, all-channel inventory access, and other customized services.

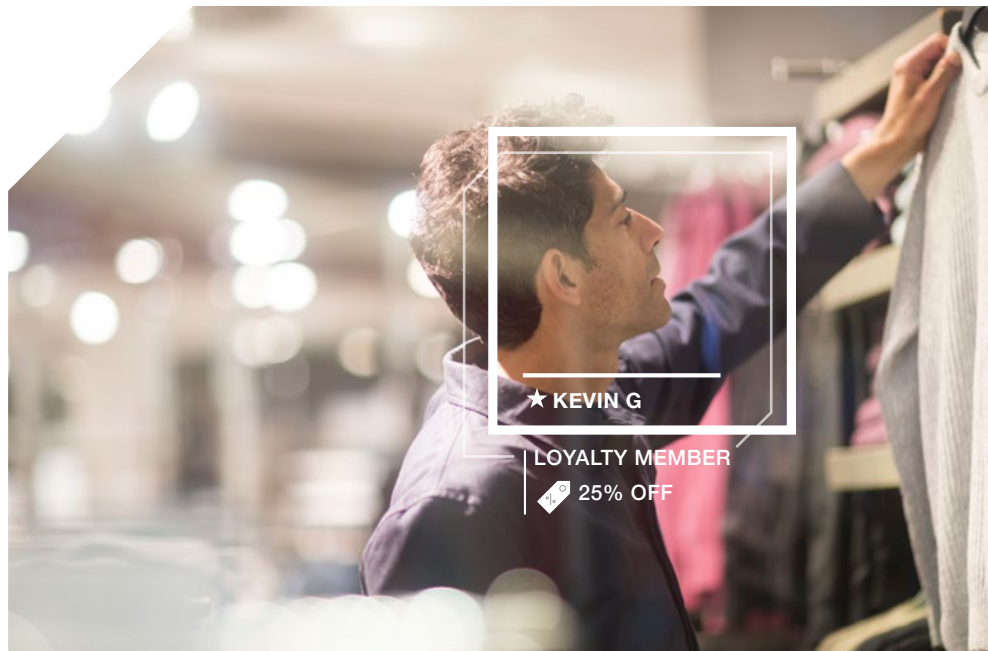
The need to improve the in-store customer experience isn’t a secret. According to Retail TouchPoints®, **87 percent of retailers view the creation of a seamless customer experience across all channels as the most critical goal of their omnichannel strategy.**

Yet, in a fast-changing marketplace with rapid developments in new retail technologies, how do brick-and-mortar stores ensure they have the right approach to enhancing the customer experience? “The solution to the problems may require collaborative innovation from the manufacturers of wireless technology to the enterprise platforms,” said Ross Sabolcik, VP and GM Industrial and Commercial IoT Products of [Silicon Labs](#).

Industry leaders from [Silicon Labs](#), [Rainus](#), [Zliide](#) and [Quuppa](#) gathered for an industry roundtable at EuroShop, the world’s leading retail trade fair, to explore the latest trends in retail. Experts from these companies discussed how delivering a seamless customer experience across all channels requires a wireless connected infrastructure to help customers get the most out of their in-store experience and encourage further engagement with the retailer.

“The solution to the problems may require collaborative innovation from the manufacturers of wireless technology to the enterprise platforms.

Ross Sabolcik, Vice President and General Manager of IoT products at Silicon Labs



How to Improve the Buying Experience for Consumers

According to the roundtable, smart retail technology is bringing together online and in-person shopping activities, such as integrating shoppers' online shopping histories with brick-and-mortar store engagements to extend a seamless retail experience.

Online and offline channels should go beyond co-existence to synergize with one another as retailers assure increases of convenience for all channels. In addition, the panel also noted that smart retail technology provides shoppers with an overall better shopping experience through data-driven customization and optimization, while providing retailers numerous benefits such as more automated processes, asset tracking and improved use of consumer data.

However, to design a consumer-centric shopping experience, retailers must first understand how modern technologies have shifted customer engagement. To improve the buying experience, retailers must design a consumer-centric shopping experience for the digital channel and complement it with services the existing retail infrastructure already supplies. In other words, online and offline retail should meld together and coexist as

channels that support the same purpose. One of the most important, however, is making sure that new customer experiences increase convenience for both channels.

One way to gather this information is through development of “digital twins” (or digital replicas), which can be a useful tool for simulating physical stores and understanding how to improve customer experiences. Digital twins can play a significant role in enhancing customer service by creating a virtual model of customers through a collection of customer insight data. Consumer activities can even be monitored through online personas or avatars in online stores and social media. Digital replicas provide retailers the data to optimize store layouts and displays for peak efficiency, promotional strategy and other what-if scenarios.

“It is crucial to find out how the modern consumer shops and what pain points they have during their shopping journey,” according to Morten Møgelmoose, CEO and co-founder of [Zliide](#), “In short, retailers should focus on solving these problems.”





Personalized Marketing

The insights from digital twins can also be used to enable shoppers to get the most out of their in-store activities and become more engaged with the retail experience. For example, when a customer approaches a product on a shelf, he or she can receive automated, customized pop-up messages about coupons or other promotions related to that product. Adding Bluetooth to the retail infrastructure to better interact with customers' mobile apps can contribute to a fully integrated omnichannel shopping experience. "To push tailored messages to the customer effectively, retailers can utilize customers' mobile apps via near-field communication or Bluetooth low energy technologies," CS Lim, Chief Marketing Officer of [Rainus](#).

Once the customer becomes engaged with the personalized offering and special pricing, promoting a positive buying decision means making sure the right product is available in-store and easily accessible through asset tracking technology. Not only does the customer feel he or she receives more customized attention, asset tracking tools free store associates from performing tedious, repetitive, and readily automated processes, such as pricing or locating products. According to Gartner, 65 percent of enterprises will require indoor location asset tracking by 2022.

"Relieving associates from these tasks can help them become brand professionals who spend more time connecting emotionally with customers at every opportunity and touch point," said Ross Sabolcik of Silicon Labs.



Retail Trends: Looking Ahead the Next 2-3 Years

The next few years will see an increase in technology deployments in retail operations, including converged digital and physical sales operations to optimize the customer experience, the efficient collecting of consumer data for analytics, and improved inventory tracking.

Several top trends are emerging. **First, the reinvention of the in-store experience will eliminate inconveniences such as long waiting lines while offering customers more personalized services.** Level of engagement with store staff varies from customer to customer. Therefore, it is important to initiate pilot projects to study how to optimize the system according to the needs of individual customers. Second, retailers are enabling customers that shop in cyberspace access to product information and staff consultation in ways that are very similar to how they experience shopping in store and speaking with staff in person. The methodologies of digital and brick-and-mortar shopping will increasingly converge.

Large data sets are needed to optimize data analytics, and one of the key future retail trends is efficient data collection in physical stores to support the objective of understanding and modeling consumer behavior. Eye-tracking, facial recognition, sensors, and digital displays are examples of data gathering technology that have come a long way in the last couple of years. These technologies are a means to understand the decision-making processes that underly buying choices.

They enable brick-and-mortar retailers to tap into a massive opportunity with regard

to collecting data on item performance and customer preferences by gathering information that retailers can use to fine-tune their customer experience strategies.

Location services, which provides a link between the physical world of the retail store and the digital retail space, is another wireless technology that can be used to collect valuable retail data. This technology makes it possible to reinvent the in-store experience for customers by eliminating key pain points such as long lines and enabling customers to get the same advice and information as they would with store staff, but in a digital format delivered in-store. This data can then be used by retailers to create a range of applications such as inventory management, in-store monitoring, workflow optimization and people counting, to name a few.

AI-driven dynamic pricing is another new trend. Rainus' electronic shelf labels (ESLs) for remote and dynamic pricing management, for example, will enable better customization while streamlining the back-end infrastructure.

After the customer has been enticed with personalized offers and pricing and has had the opportunity to touch and feel the merchandise, the retailer has a window of opportunity to close the sale. A strong finish during the "last mile" can be a game-changer for retailers and for customers who value personalized services. In this case, mobile payments that expedite the purchasing process and remove check-out queues may tip the consumer towards the final decision and create a positive impression that brings the shopper back for more.

Adding Value to Retail Businesses

A lot of retailers have bought into the idea of smart retail, but many have done so mainly to make their internal operations more efficient, leaving consumers waiting to see the actual value to them. In fact, there are several customer-facing ways to maximize return on smart retail investments, such as reducing customers' pain points, adding automation, continuous optimization, and collaboration.

Creating a robust link between the physical store and the digital shopping space with a location-based solution can have many applications. For example, Quuppa's locators and position engine for tracking ESLs and smart tags can tell customers and staff where the products are, how many products are on the shelf, and where the customers are in the store.

To increase the ROI of omnichannel investments, selecting solutions that are versatile and easily scalable is essential. Multi-purpose location solutions, such as ones offered by Quuppa, do not lock the retailer into a single technology or a closed ecosystem that limits the potential for future expansion or integration. "Quuppa provides a versatile solution that can be used in a wide range of use cases, is compatible with other technologies to expand the range of use cases and offers a large and open ecosystem of partners to provide adjacent solutions for your system," said Fabio Belloni, Chief Customer Officer at [Quuppa](#).

Zliide believes that consumers drive the business, and retail technology that is consumer-facing will offer the biggest ROI and competitive edge in the long term. Zliide's intelligent version of the traditional loss-prevention tag creates an extremely simple solution for a significant pain point and helps enable a seamless in-store experience. By focusing on what is important for the consumer, retailers focus on what is driving success in business. Customers should feel like purchasing a product is the easiest and most convenient thing in the world – and if it's not, they have plenty of other options.

Don't be afraid of testing new technologies out. Zliide's CEO and founder Morten Møgelmo said, "Proof of concepts don't need to be perfect or integrated into the whole organization. If new technologies have value, they can always be integrated later. If they don't have value, you haven't invested too much and you can quickly move on."

“Quuppa provides a versatile solution that can be used in a wide range of use cases, is compatible with other technologies to expand the range of use cases...”

Fabio Belloni, Chief Customer Officer at Quuppa





Innovative Collaboration

As retailers search for ways to complement their products and services through improving the customer's in-store experience, it is vital to seek out thought leadership across the retail value chain because the solution may require collaboration from other retail and technology innovators.

The future of smart retail requires secure, high-performance wireless connectivity. Silicon Labs is the leader in IoT wireless connectivity and provides complete software suites for development of wireless protocols such as Bluetooth, Thread, WiFi, Zigbee, Z-Wave and proprietary standards. Silicon Labs products enable developers to securely connect retail hardware to the internet, opening the door to new omnichannel services and strategies to increase customer loyalty and retention through improved in-store experiences.

As the first wireless solution-on-chip supplier to support Bluetooth direction finding, Silicon Labs offers optimized Bluetooth silicon, software and development tools to help our customers design low-cost, low-power products to fuel the market with smart traceable products for the growing location positioning ecosystem.

Interested in learning how Silicon Labs' retail solutions can help your business? [Contact Us Today](#)

