

White paper Retail's future in a hyperconnected world

Retailers today often have deep, rich insights into their customers' needs, preferences and buying habits... at least, they do when those customers shop online



Introduction

With brick-and-mortar stores, on the other hand, retail businesses can find it much more difficult to understand shopper behavior: who's simply browsing, who needs help from staff and when, who's buying and why. Today, however, new intelligent systems that use Internet of Things (IoT) sensors, Big Data and advanced analytics are promising to help these businesses gain fresh, value-boosting insights into in-store traffic and transactions in ways that weren't possible just a few years ago.

Fujitsu has a name for this kind of future: hyperconnected business. In retailing, the real-time insights from hyperconnectivity can boost store productivity, reduce waste and losses, drive better cash management and improve understanding of customers. Ideally, they also lead to better customer experiences, greater brand loyalty, new upselling and cross-selling opportunities, and expanded business growth.

Hyperconnected business solutions will be vital to help retailers deal with multiple challenges on the horizon. More and more, customers are expecting shopping experiences that are seamless from one channel to another, online and off. They're also shopping more with smartphones and tablets, requiring businesses to adopt new strategies to accommodate these habits. While brick-and-mortar stores embrace digital transformation and work to put cross-channel customer data to better use, they will also need to find innovative ways to be more than just 'showrooms' for the online competition. One way to do this will be through social media and other technologies for more personalized service.

A new generation of solutions is now being tested and deployed by retailers facing such challenges. Fujitsu is helping these businesses connect front office, back office, logistics and customer channels to deliver the seamless experiences buyers are looking for. These solutions are proving their value by enabling stores to become more efficient and ready for a smarter, hyperconnected business future.

This is a future that is truly 'customer-first'. It's one that recognizes success comes from satisfying customers in all the ways they've come to expect today. And it's what we call Connected Retail.

Brick-and-mortar versus online

Think about the average physical store and you quickly realize many key features haven't changed in decades, if not longer. Certainly, the in-store point-of-sale systems today may be digital. And staff may be able to help customers order items via the company's website if they're not available on the shelves. But the basic principles have long gone unchanged.

Customers walk in for a variety of reasons and either wander about, randomly browsing through goods, or head straight for a particular area with specific items in mind. If it's shoes or clothing they're looking at, maybe they'll try something on, maybe they won't. After however long in the store, they'll either leave without buying anything or arrive at a payment location to make their purchase. Unless a salesperson walks up to customers and asks at some point, the store won't know much about why they're there and what they're looking for, much less who they are, how frequently they've visited in the past and how much they've spent there over the years.

Compare that to the many megabytes' and gigabytes' worth of data and insights online retailers have about any visitors to their sites.

From their integration with Goodreads and Kindle e-book readers, for example, Amazon knows enough about what readers highlight in their digital reading materials to regularly send them personalized book recommendations. And, using its advanced Customer DNA database, eBay can understand the online browsing and buying behavior of multiple family members, even if they're all using a single household account.

Many other large retailers today enjoy similar insights into the habits of customers who buy from their online stores. But when it comes to understanding shoppers in physical stores in the same ways, these same retailers are in the dark.

This is where new and emerging connected technologies and analytics offer the potential for dramatic change – affecting retailers' bottom lines by delighting customers.

Working in tandem with a retailer's IT infrastructure and a unique identifier almost all of us today carry in our purses or pockets – a smartphone – devices such as networked cameras, WiFi access points, beacons, radio frequency identification (RFID) tags and more can help make an in-store shopper's experience easier to track, analyze, understand and personalize. Eventually, such systems could help connect a shopper's online and in-store preferences, histories and purchasing details – with that person's permission, of course – to create a better, easier, more seamless and hyperconnected shopping experience, online or off.

Emergence of hyperconnected retailing

For many retailers, the decision to create a more digital shopping experience in their physical stores stems from a nagging problem they're hoping to solve. Maybe it's a steady decline in sales in a certain location or department. Or maybe it's chronically long lines at the point-of-sale systems on Saturday afternoons. Whatever issue they face, store operators seeking solutions must begin by finding new ways to answer the question, "Why?" For example, why did customer traffic drop dramatically on one weekend in May? Or why do large shopper crowds in one department not translate into equally large sales revenues?

Stores can begin answering such questions with the help of smart, connected technologies such as laser sensors, WiFi access points and beacons. Using devices like these, they can start gathering data about how customers and staff move through different departments, how long they spend in each area and whether browsers eventually become buyers.

For example, one retailer Fujitsu works with deployed a variety of in-store sensors, smartphones and staff-worn wearables to gain new insights into shopper behavior and sales. By analyzing data collected by such devices, the business discovered it did not have enough staff on hand during regularly recurring peak traffic hours, and that high-performing salespeople stood in different locations compared to average performers to better engage with customers. In response, the company changed how it trained and scheduled staff, which resulted in a 10 per cent increase over the previous year's sales figures and an 18 per cent increase in customer engagement rates.

While every type of retailer could benefit from gaining such new insights, some segments in particular are leading the way in adopting hyperconnected business solutions in their stores. And the types of technologies they're testing vary according to the unique challenges of their industries.

Fashion retailers, for instance, are increasingly using RFID tags to keep better track of their inventories. By being able to know exactly where each item is from initial delivery to final sale, these businesses can reduce losses, avoid wasting time looking for misplaced stock and better match supply with demand, which helps avoid investing in items that don't sell or disappointing customers by running out of popular items.

Grocery retailers, on the other hand, tend not to use RFID tags for low-cost food items. However, many are beginning to integrate online and in-store experiences through, for example, smartphone apps that guide shoppers to items on their grocery list or click-and-collect programs in which customers can order online and then pick up their groceries at a local shop.

While food and fashion retailers have been among the earliest adopters of in-store analytics and hyperconnected business solutions, many other types of sellers are likely to do the same as such technologies advance and become even smarter. The benefits of doing so are becoming increasingly clear.

Consider, for instance, how a multinational clothing retailer Fujitsu works with was able to improve operations in ways that wouldn't have been obvious without the insights provided by IoT-generated data. Analysis of information from a variety of in-store sensors helped determine that repeat customers accounted for nearly 50 per cent of regular foot traffic, and that traffic in one department nearly doubled during one particular week. Armed with these findings, the business realized it could boost sales through a loyalty program aimed at rewarding repeat customers and through offering more promotions of the kind that led to a doubling of shoppers.

Fujitsu helped that same retailer use sensor data to map 'hot spots' of customer traffic throughout a store, enabling the company to ensure more staff members were on hand in busy areas. With a better understanding of traffic patterns, the business also changed floor plans and signage to encourage greater shopper activity.

Looking ahead

However effective they're proving to be, hyperconnected technology deployments such as the ones discussed above are just the beginning for smarter, more digitally-enabled retailing. As more layers of intelligence are added to such systems – whether it's new kinds of in-store sensors and other hardware, or new cloud-based software for analysis, predictions and AI – businesses will discover more and more opportunities to make brick-and-mortar shopping as easy, seamless and precisely targeted as online shopping is today.

The next stage of hyperconnected retailing can already be glimpsed in experiments such as Amazon Go, the online giant's new foray into smart, automated offline shopping. Currently operating in a trial run in Seattle, Amazon Go is a cashier- and line-free grocery store where sensors and computer vision track every item grabbed by shoppers. All customers have to do before shopping is scan an app at the entrance; after they leave, their Amazon accounts are automatically billed for the items they selected.

Such tests are clearly more than traditional brick-and-mortar stores with a few new smart sensors and IT added on. Instead, they're enabling entirely new models of retailing in which physical shops can stay relevant and competitive, even in a world of commerce that's increasingly mobile and online.

Ultimately, advanced and well-designed hyperconnected business solutions could help retailers eliminate many of the typical downsides for customers: things like crowded aisles, out-of-stock merchandise and long lines to pay for items. At the same time, businesses could preserve the things that traditionally appeal most to in-store customers: face-to-face assistance, makeovers and other amenities and the opportunity to touch or try on merchandise before buying. In all ways, this really is about putting the customer first.

Getting to such a point, however, will require companies to deploy the right combination of technologies that work as intended, without appearing intrusive or 'creepy' to customers. Because systems like these aren't currently available off the shelf, retailers will need to work with service providers and partners that understand such technologies and have the know-how and experience to ensure their deployments are successful.

At Fujitsu, we've built our consultative approach to hyperconnectivity on more than 50 years of experience with retailers, as well as with customers in many other industries. We have the expertise, innovation and global delivery capabilities needed to determine the right approach for your organization, build the business case for transformation and deliver the benefits of 21st century, hyperconnected retailing.

Our goal is to help every customer rethink how its organization operates, and to better connect people, information and things through data, analytics and technology. By doing this, businesses can see and understand how they operate in real time, make better decisions, innovate faster and unlock new value for customers.

To learn more about Fujitsu's hyperconnected business solutions and how brick-and-mortar retailers can improve efficiency, reduce waste, better understand customers, optimize customer experiences and grow their businesses, visit <http://connectedretail.global.fujitsu.com>.

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