A NEW JOURNEY

How the **Internet of Things** Will Redefine Customer Engagement and Loyalty

By Peter Hirshberg

THE *INTERNET OF THINGS (IoT)* MAKES ITS POPULAR CULTURE DEBUT WITH TOM CRUISE

As it turns out, Steven Spielberg can do more than just direct award-winning, blockbuster films.

His vision for retail and the future of customer engagement in the 2002 movie, "The Minority Report," was our first glimpse into a completely responsive, sensor-rich retail future, and an introduction of a concept we now know as "The Internet of Things." At the time, the idea seemed like science fiction: allowing in-store digital advertisements, outfitted with customer data and intelligence, to identify the customer (aka Tom Cruise) and adapt to that customer via personalized context in real-time. What was fantastic a little more than a decade ago is now the basis for competitive differentiation! We've seen this intelligent technology make big waves in retail in recent years through the use of big data and analytics, but the stage is now set for the IoT to bring about a tsunami of dynamic innovation for the retail world.

The IoT enables communication and connectivity between physical devices and provides a fresh platform for customer engagement. It's on track to not only be the next big thing in retail, but it is destined to become interwoven into the lives of consumers, setting us on a journey that will forever change the way we all interact with the world.

The global phenomenon of the IoT, also referred to as the "Internet's next-generation," will see more than six billion devices[1] connected to the Internet and will fundamentally change the nature of retail business models more than the Internet ever did. What's more, the IoT will completely flip the switch on retail customer engagement and loyalty. At this moment, we are sitting between the mundane and the extraordinary.

Internet of Things By the Numbers

Retail IT spending will see large growth associated with IoT spending, according to research from IDC [2]. The IoT IT market associated with in-store consumer digital offers will *grow from $181 million* in 2014 *to $223 million* in 2018.

According to a Pew Research survey, the vast majority of respondents agree that the expanding network of everything and everyone, and the growth of the IoT and embedded and wearable devices, will have *widespread and beneficial effects by 2025*[3].

IDC also predicts that the rise of IoT solutions will translate into billions of dollars of IT opportunity for vertical-solution focused vendors, estimating that *the IoT will include 26 billion units* installed by 2020.

DELIVERING INTIMATE COMPUTING WITH *INTELLIGENT CONTEXT*

Think back 10-15 years, when personal computing was just a one-way street. Consumers knew about their computers, but the computer didn't know anything about them. As time went on, computers and mobile phones became "smart" through intelligent software and powerful analytics. Personal computing is now not only a two-way street, but a massive information highway. We still have access to a lot of information on our devices, but computers know much more information about us. This brings us to the first and most critical leg of the journey to successful implementation of the IoT: intimate computing.

The concept of intimate computing as it relates to the IoT means that retailers and brands can interact with a customer throughout the life cycle of the product, and make a significant impact on loyalty. Customer loyalty programs traditionally follow this pattern: sell the product to a customer, keep track of the customer and hope they stay loyal – if they are, it is less expensive to sell them another product. With the IoT, retailers and brand marketers have the unique opportunity to interact with the customer across the entire supply chain and throughout the life cycle of the product in the hands of the customer.

With the advent of Bluetooth low-energy beacon technologies, retailers have already started to take advantage of engaging with shoppers in the store to encourage loyalty and sales conversions. For example, a retailer could send a push notification to a customer approaching the shoe aisle in the store, via the retailer's mobile app, for an offer of 10% off their next purchase.

A wonderful real-world example of this is the Concierge employee app from GameStop. When a shopper signs up to receive the video game retailer's PowerUp loyalty program and opts in, s/he is immediately logged into the store's network upon entering the store via beacon technology. The Concierge app gives store staff direct access to customer interests and gaming libraries via tablet as soon as they walk into the store, delivering a more efficient customer service experience.

Why Retailers Love Beacons

65%
of smartphone owners are likely to use beacons to access promotional coupons

Even in an age of increased privacy,
41%
of smartphone owners say that they are willing to be identified by their smartphone[4]
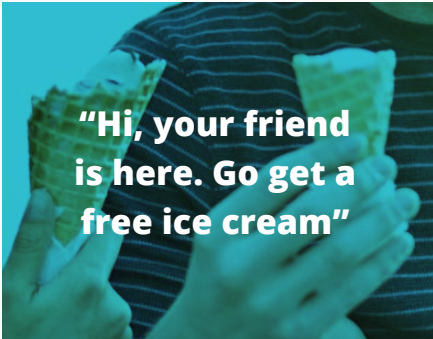
Retailers must walk a fine line with intimate computing to avoid bombarding their customer with too much or irrelevant advertising and offers. The goal of intimate computing must be to create something more inspiring and useful than an interruptive ad. **Let's take a look at an example:**

CASE STUDY: THE BEACON, THE BRAND AND THE ICE CREAM COOLER

"Hi, your friend is here. Go get a free ice cream"

To celebrate the 50th anniversary of the ice cream bar, beacon platform provider NewAer partnered with Unilever to promote its most famous ice cream bar brand, Magnum Ice Cream. A digital marketing first, Magnum launched a person-to-person, Beacon-powered proximity marketing strategy, using NewAer's proximity platform and beacon technology, to allow people to find out what friends are nearby and invite those friends to share an ice cream with them.

If two consumers both have the app, one user's device (that is within a few feet of an outfitted ice cream cooler,) could notify another user and tell them, "Hi, your friend is here. Go get a free ice cream." The goal of the campaign was to "create unique opportunities to connect with friends and share moments, rather than a barrage of one-way marketing."[5]

TRANSFORMING EVERYDAY PRODUCTS INTO *SERVICES AND PLATFORMS*

We have established that the very "soul" of the IoT is for physical objects to intelligently communicate with consumers and engage with them on a more personalized basis. The next leg on the journey to the IoT is the idea that these objects can be utilized as services and platforms.

To see a wonderful example of an everyday object used as a service to create memorable experiences, look no further than Disney's Magic Bands, developed by the innovation department at Disney.

Launched in 2013, the Magic Bands are wrist bands outfitted with radio frequency technology to be an all-in-one device that connects park visitors to everything from Fast-Pass ride access, to meal-plan confirmation, to hotel room access. The Magic Bands can even serve as a "mobile wallet" that connects to a guest's credit card information, allowing them to make souvenir purchases quickly and easily.

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customer loyalty

advanced manufacturing

quick innovation

For retailers and brands, enabling products to provide innovative services means challenging the incumbent business model. We are currently in a "golden age" for partnering between smaller, more nimble start-up companies and large organizations. Start-ups can innovate more quickly, but they need the support of an advanced manufacturing base to seamlessly integrate with the supply chain in order to get these smart devices into the hands of the consumer. This, in addition to utilizing highly interdisciplinary skill sets within science, technology, engineering and mathematics, combined with experience design will be the nuts and bolts of the IoT.

Retailers and brands also need to consider that the IoT and intelligent, always-on connections creates the opportunity to sell what used to "only" be a product as a service, creating annuity revenue opportunities and greater margins. Take, for example, Rolls-Royce engines, which power 600 airlines around the world. But the company doesn't sell engines, they are selling a service device. Their business model allows them to provide 10,000 hours of power to an airline for their engines

that are actually smart objects. Because of the intelligence built into the engine, it can anticipate maintenance. Today, about 10 percent of all flight cancellations and delays are due to unscheduled maintenance events resulting in billions of dollars lost to the airline industry and negative customer sentiment. This type of predictive maintenance from a smart jet engine can save about 60,000 delays and cancellations a year in the U.S., boost customer loyalty and create more positive customer sentiment.

By turning products into *services*, retailers and brands can change customer loyalty behaviors and completely redefine their value to the customer.

The flip side of turning products into services is the notion of making products into *platforms.*
This allows retailers and brands to engage directly with development communities to help co-create smart objects while fostering a new sense of loyalty from consumers. A perfect example of this is Quirky, an innovative co-creation firm that partnered with GE to create a smart air conditioner – all because an every day person had the idea.

"The genesis for the idea started as I was driving through Northwest Washington and each one of the apartments had a window air conditioner hanging outside of it. I was thinking that they are probably wasting a lot of energy by running these things when they are not at home," said inventor, Dr. Garthen Leslie. "The smart window A/C will save them money because they will not have to run it when they're not there, or when they don't need to. They can remotely turn it on and off and adjust the temperature."

With the co-creation of the smart window A/C, GE learned that if brands open up interfaces to physical things, it is possible to speed up development and the supply chain. It allowed them to learn how to build something quickly, cheat the manufacturing step, and get it out to market in a number of months. If you allow customers to be a part of the development process, customer loyalty moves from "something that happens after the customer purchases the product and we have to keep up with you" to "we want to engage you even before the creation of the product." With this, retailers and brands can be fan communities promoting a product throughout its lifecycle.

IT Becomes a Part of
THE FABRIC OF EVERYDAY LIFE
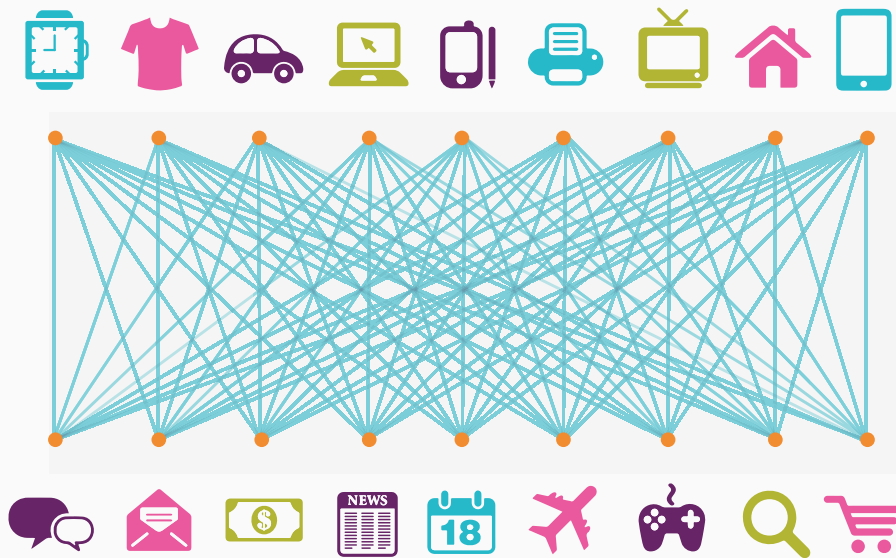
By outfitting the places where we live with IT, such as buildings or cars, or even in the clothes and accessories we wear, we can transform daily life and make it easier to work, travel, shop and stay healthy. For retailers and brands, becoming a part of and improving the every day lives of customers is the goal, which ultimately enhances customer engagement and loyalty.

The availability of the Apple Watch in early 2015 is an example of the next generation of IoT. This new device will certainly add IT to where we live, or rather, where we are all the time. It is the poster child for intimate computing, as it will be online and ready to serve customers and anticipate and understand their needs. The watch is Apple's most personal device. Although the device is simple in its physical form, retailers and brands take note that its powers are rooted in its ability to become a part of its owner, and help them program the world to meet their needs. It will influence the convergence of fashion and technology, as wearables increasingly become more mainstream and ubiquitous.

THE INTERNET OF THINGS IS HERE:
ARE YOU READY?

The IoT, while powerful and almost magical, also lends itself to a myriad of privacy, trust and security issues for retailers and brands to contend with. On top of that, there are business and ethical issues to consider when you take inanimate objects and give them "power." This was the theme of the 1939 Disney film, "The Sorcerer's Apprentice," where Mickey Mouse empowers an army of brooms to get his work done.

Like so many organizations that take on new initiatives, Mickey was not exactly sure what he was doing or where it was going to lead. The brooms perform fabulously until they performed too well, causing a huge mess. In the film there was no resolution of this dilemma, just a stern admonishment to Mickey after the Sorcerer made things right. In the world of IT and retail, there is no "Sorcerer" of last resort. Using these technologies elegantly, ethically and with constant attention to customer perception is the responsibility of today's retail executives and innovators. In order to complete the journey to the successful implementation of IoT, retailers and brands need to think disruptively, re-architect their technologies to adapt, and re-design their organizations to create new values while being mindful that we have at our fingertips one of the most powerful and pervasive forms of technology. Most of all, retailers need to test new ideas and innovate quickly, while creating a culture that fosters experimental innovation in order to be crowned the leaders in the next generation of customer engagement and loyalty.

SATISFIED

UNHAPPY

HAPPY

VERY UNHAPPY

VERY HAPPY

References

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