Digitizing the In-Store Experience

Current use and trends of in-store digital technology in retail

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At this stage in the “digital revolution” it is clear that technology, the internet, mobile access, and other innovations are altering and enhancing the way business is done in every field. Retail is no exception, and perhaps even a prime example. Today although ecommerce only represents roughly 9% of total retail sales in the United States, 52% of total retail sales are “web-influenced,” meaning digital channels played some meaningful role in the customer’s purchase process.\(^1\) What is more, an increasing share of digital sales (roughly 25% in 2014) are coming from mobile devices, such as smartphones and tablets.\(^2\) For the purposes of this paper, the result of these trends are twofold. First, as the influence and role of mobile commerce grows, the intersection between physical and digital retail becomes increasingly blurred. Customers cross between channels constantly, and also interact with multiple channels simultaneously. Second, as other aspects of customers’ lives become increasingly digital, the expectation is that retail experiences will also deliver cutting edge, engaging digital experiences. As a result of these factors, retailers are investing heavily in in-store digital experiences, to meet and exceed customer expectations, to engage customers beyond mere transactional


exchanges, to blend the physical and digital retail channels, and to increase sales.

**Areas of Digitization:**

Retailers are finding ever more ways to incorporate digital technology into the physical retail experience. Approaches range from mobile POS, to digital kiosks, to virtual reality, to iBeacon and RFID triggered engagement. The following are descriptions of several key ways retailers are using digital technology in-store:

**Mobile POS:** Many retailers are deploying mobile point-of-sale systems to combine ease of transaction completion, customer service, and the ability to engage the customer with content in addition to transaction. Examples include retail associates in department stores equipped with iPads and branded apps that contain additional product information and the ability to order out-of-stock items, then complete the transaction directly on the iPad.

**Digital Signage:** Video screens and digital signage allow retailers to provide customers with up-to-date information and engaging content. This can be as simple as rotating information screens that provide product pricing, specifications, contextual usage, etc., or they can deliver more
marketing driven content such as videos, product manufacturing exploration, etc.

**Beacon Marketing:** Beacon marketing allows retailers to conduct highly targeted in-store marketing with customers. As mobile phone penetration reaches near ubiquity beacons provide retailers with the technology to offer targeted messages, offers, product information, and access loyalty program and other customer-specific information.

**Touch Display:** Physical/digital engagement is becoming an increasingly important and attractive form of the in-store experience. Touch screens are one of the best ways to excite customers with digital technology without merely asking them to watch a video. Touch screens can be used for everything from custom product design, to product exploration, to inventory access, to purchase transactions.

**Smart Fitting Rooms:** Combining several other technologies, smart fitting rooms allow retailers to match digital experiences with specific products customers are considering. There are several ways to deploy this technology, including RFID tags or product scanners. Once in the fitting room customers can then access additional information via screens. In the best examples, customers can automatically be shown engaging material such as fashion catwalk videos of the products they are trying on.
Company Case Studies:

New Balance Custom Kiosk: Athletic footwear and apparel brand, New Balance, has long been known for its performance product innovations and commitment to domestic manufacturing in the United States. In 2015 New Balance combined these strategic assets with an interactive in-store digital kiosk to allow customers to design their own custom New Balance shoes. The kiosk uses proprietary software that shoes the skeleton of several iconic “lifestyle” footwear models, which customers can design in a wide range of color and material combinations, as well as custom writing on the shoe heel. In total, 48 quadrillion combinations are possible. The kiosk links to New Balance’s order management, inventory, and manufacturing systems to place the order and begin the custom manufacturing process. The customer then receives their custom New Balance shoes within less than a week, and as few as four days after using the kiosk. New Balance has deployed the kiosks in several of their own stores, as well as key retail partners, such as Foot Locker.³

**Kate Spade Saturday Digital Storefront:** Fashion brand, Kate Spade, offers a sub-brand named Kate Spade Saturday, which has become known for quirky and experimental marketing tactics. In 2013 the brand jumped on the pop-up shop trend, but with a unique digital twist. In four empty storefront locations in New York City the brand installed temporary digital storefronts on the front window space of the locations. The giant touch screens allowed people passing by on the street to browse product and place orders. For deliveries within New York delivery was free, and in many cases delivery was guaranteed within one hour of purchase. The digital storefront also featured motion sensing technology, which enabled the display to change and offer dynamic content as people passed by. The goal of the experiment was to engage customers while also allowing for some of the instant gratification of physical shopping. Kate Spade Saturday partnered with eBay, who handled the technology aspects of the approach. The store space behind the display housed the technology, including large projection camera and motion sense devices. No inventory was held on-site. As part of the partnership with eBay, the courier deliveries also only accepted PayPal payments from customers. Couriers delivered product within one hour and waited while customers tried on the product and decided whether to confirm the purchase.⁴ Healy Cypher, head of retail innovation at eBay said

about the project, “You’re going to stop by a window, and by the time you get to Central Park, a courier will have a [Kate Spade Saturday] picnic blanket for you.”

5 http://mashable.com/2013/06/09/retail-store-future/
**Google UK:** In 2015 Google opened the doors to its first global Google shop, which served as an interactive lounge where customers could demo android enabled products and talk with Google product experts. In addition to serving retail purposes, the store also highlighted googled other services and technologies in highly interactive ways. There were two key examples of non-transaction digital engagement. First, a large virtual graffiti wall was installed for customers to design their own “Google Doodle” (the home page designs on Google that change daily), with select examples being chosen for the actual
homepage. Second, the store had a surround screen theater of sorts in which customers could explore Google Earth via high definition touchscreens.⁶

**Burberry Retail Theatre:** Fashion brand, Burberry, regularly experiments with new retail formats and the use of digital technology in-store. During London Fashion week the brand hosted a series of interactive events at 25 of their stores across the world. The event featured streaming of Fashion Week events, and each attendee/customer was given an iPad with Burberry’s app, which allowed them to access further information about the events, products, models, and other aspects of both London Fashion Week and Burberry.\(^7\) In another retail experiment Burberry also used RFID technology to trigger catwalk footage in dressing rooms when customers entered with certain products.\(^8\) Both of these

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\(^7\) [https://www.linkedin.com/pulse/20140424133404-20233091-7-brands-getting-creative-with-in-store-technology](https://www.linkedin.com/pulse/20140424133404-20233091-7-brands-getting-creative-with-in-store-technology)

examples highlight how Burberry blends its localized in-store experience with its power and influence as a global fashion brand.

**Topshop Virtual Reality:** Along similar lines as Burberry’s interactive London Fashion Week experience, Topshop employed Oculus Rift virtual reality headsets to give customers a near-first-hand seat to London Fashion Week in 2014. The retailer partnered with Oculus Rift and conducted a contest where five winners were outfitted with customized virtual reality headsets. Over the next three days Topshop then let other customers relive the experience on-demand
using the headsets. Users were able to enjoy a 360 degree view of the Fashion Week shows and events, including backstage access.⁹

**Macy’s iBeacons:** Macy’s was one of the first retailers to experiment with Apple’s iBeacon technology in-store. iBeacons are essentially Bluetooth hotspots, equipped with Apple’s iOS. Macy’s partnered with retail app, ShopKick, to send notifications to customers when they entered Macy’s stores in New York City and San Francisco. Users with the app on their phone received notifications about deals on certain products or reminders about products the customer had

previously shown interest in. To begin with, Macy’s only used the notifications when customers initially entered the store, however the brand plans to increase targeting, perhaps to a department level, such as footwear, in the future.1011

A Conversation with New Balance:

As part of the research for this paper I was able to sit down with Ashley Mitchell from New Balance. Ashley is a key member of the the Direct-to-Consumer/Digital Strategy group at New Balance. The group works on a range of projects that blend ecommerce, physical retail, digital customer engagement, and omnichannel retail experience. Ashley worked on the strategy and deployment of the New Balance Custom Kiosk project.

Below is an edited transcript of our conversation about New Balance’s Custom Kiosk Project:

Questions:

What did NB consider the goal/purpose of doing the custom kiosk project?

10 https://econsultancy.com/blog/64408-12-more-examples-of-digital-technology-in-retail-stores/
11 http://www.theverge.com/2013/11/21/5129336/macys-apple-ibeacon-support-herald-union-square-stores-shopkick
Overall Objective: Leverage the online customization tool to create a compelling digital and physical global experience at retail focusing on 2D rendering and 360 degree imagery to allow consumers to create their own unique NB products through the design process.

New Balance embarked on the Custom Kiosk project to engage with consumers in a different way in store and to provide them with a unique digital experience in-store. NB was looking to provide an omnichannel experience for a consumer (mashup of digital & physical).

New Balance originally partnered with Footlocker to launch the first custom kiosk in their New York Times Square store in August 2013 then decided that this was a unique experience that should be provided to consumers in New Balance Flagship stores (now there are kiosks in New York City & Boston).

**Did NB partner with outside groups, either for the design, technology, etc.?**

**If so, who and why?**

NB decided to partner with external groups to leverage their best practices since there weren’t in house skills. It was more cost efficient for us to use external sources instead of hiring internal talent for this project.

NB partnered externally with a vendor for the renderings of the shoe: **3DS (formerly RTT)**
For fabrication we used Upshot (agency who works with NB on numerous store initiatives). Ultimately they developed the style guide, overall kiosk design and then the fabrication that was physically installed in stores.

Development Work on the custom kiosk site was performed by the NB dev team in St. Louis.

What operational challenges did you encounter during the design and launch? I’m thinking specifically things like system integration, functionality, etc.

One of the operational challenges with the custom kiosk was when everything would push from development to production. This caused the entire system to fail several times and caused a few weeks of delays.

End to end testing was a difficult process since there were so many areas that this project touched on including: NB development, OMS, Responsys (emails), store POS, manufacturing (factory), shipping (UPS), Customer care (approval that there was no profanity on the personalization on shoe), etc. Getting this process to flow smoothly to mimic the entire E2E process was difficult and required substantial resources and time. E2E lasted for over 4 weeks and involved about 20 different resources.

One of the most difficult integrations was the connection to enable the order to be processed which required the OMS. There were changes being made in parallel
to the OMS while we were creating the kiosk which was complicated. There were often connectivity issues between the kiosk and the OMS and orders could get lost in system if the payment was not properly paid through the POS.

What adjustments or changes did you make to the project as a result of the challenges?

Adjustments were made overall to the project to streamline the process. We did some process mapping exercises to find out where there were inefficiencies. Ultimately changed the email cadence since consumers weren’t receiving notification that their pair of shoes had been ordered until more than 24 hours later than when they ordered them (since there needed to be confirmation of payment and approval by customer care). Now consumers receive confirmation that their order has been processed real time which alleviates consumer frustration.

What is the underlying technology used for the custom kiosk?

The underlying technology almost mimics the technology that is leveraged for the NB shoe customizer online. It leverages product rendering (so that consumers can see the image in 3D) and checkout technology (similar to online) to enable consumer to enter their shipping information, etc.

What have the results been? If you have any stats on usage/orders that would be great.
The Footlocker kiosk was hugely successful in not only placing orders but also getting consumers to play with the kiosk then purchase the inline 574s from the store (so there was a halo effect).

Typically each kiosk produces about 12-15 orders per week.