WHITE PAPER

A VISION FOR THE FUTURE OF RETAIL

– *How data capture technologies are shaping the future of customer experiences in retail*

DATALOGIC
THE VISION IS YOURS

In a retail landscape that is changing daily, you have to be prepared for constant evolution. Stand still for too long try to assess how to take the next step forward and you may in fact find yourselves two steps backwards, or worse. It is no fluke that barcode technology has played a vital role in retail for over four decades and from where we are standing, that's not about to change.

Since the first ever barcode was scanned in 1974, barcode and data capture technology has evolved to keep up with the rapid pace of change in retail, all the while uncovering new ways to improve efficiency, streamline operations and automate processes. In this white paper we look at how data capture technology can be leveraged today and in the future to add value and enhance customer experiences across four key areas of retail including:

- Loyalty
- Self Shopping
- Assisted Selling
- The Checkout

IS THERE A FUTURE FOR LOYALTY?

After discussing this topic with numerous customers, industry leaders and in a number of other white papers, we keep arriving at the same conclusion; that customer loyalty needs to go beyond having a points-based scheme, it needs to have the customer front and centre.

The way that we shop is changing and consumers simply don't want to have a purse or wallet full of loyalty cards anymore. In a world where 85% of us have a smartphone[1], the whole concept of swiping a card at the till is dated and loyalty apps are becoming ever more prevalent.

2D barcoding is a must for mobile loyalty

With push notifications for offers and instore way finding, loyalty apps have huge potential to enhance the instore experience for customers, don't fall at the last hurdle because your scanners in store don't support decoding from a smartphone screen. This isn't just a problem at manned checkouts either, there are many self-checkout systems deployed across the UK that do not support reading from a mobile device.

As the number of customers with loyalty apps, coupons or e-receipts on their phone increases, another potential issue comes rising to the surface. In order for loyalty data to be captured, a customer needs to hand their loyalty ID to the checkout assistant, so the customer's unique identifier or barcode can be scanned. Now this wasn't a problem when all we were handing over was a piece of plastic or a paper coupon, but there is a genuine anxiety about handing over our smartphones. More and more of our clients are asking for advice on this issue and we're pleased to say that there is a solution.

The power of two

One of the UK's leading pet retailers empowers their customers to scan their own phone at the point of sale, while their sales associates are processing a transaction. The retailer has two scanners located at each of its checkouts. Firstly, a compact scan engine integrated just under the pin entry device (PED) for customer facing scanning of either the loyalty card or its electronic version on a smartphone. Meanwhile, the checkout operators use a cordless scanner at the POS.

Having two scanners greatly speeds up the process as loyalty cards can be scanned concurrently alongside items in the customer's trolley or basket. This greatly improves the customer journey and increases checkout productivity, avoiding valuable time being lost whilst a customer locates their card or loads up their app.

These solutions address what is still quite a traditional view of loyalty and we anticipate a more significant shift in the way that loyalty programmes are formulated. According to research conducted by Deloitte in 2017[1] the three biggest drivers of loyalty are value for money, trust and quality. In addition, customer service, convenience and shopping experience are all regarded as more important than the brand's loyalty scheme. In our next chapter, we investigate how data capture can be used to achieve some of these values by combining loyalty with self shopping.

DRIVING LOYALTY WITH THE NEXT GENERATION OF SELF SHOPPING

Self-shopping is not a new concept, you take a device, scan your items as you shop before heading to checkout, scanning your loyalty card and making payment. However, if you wait until the point of payment to scan a loyalty card, you can only provide offers that affect future behaviour.

What if you combined self shopping with your loyalty programme and customers were asked to scan their loyalty card or app to access or log in to a self-shopping device? This is where we think the future of self shopping can open a whole new world of possibilities, including an ability to send personalised offers, while a customer is still in the store and therefore, while you are more likely to be able to influence their basket size? Your average transaction value goes up, you gain the same, if not more, insight about what a customer is purchasing and more importantly you give your customer an instore experience that will make them want to come back again and again.

Location, location, location

Devices like the Joya Touch also have features such as geolocation functionality which could be used to create a more dynamic and relevant shopping experience. Utilising this kind of "indoor GPS" data, together with customer insights could add a new level of relevance to the real-time offers that you are able to present to your customers as they enter specific areas of the store. This, we believe, is so much more powerful than a coupon could ever be.

There is also enormous potential to use the data collected to influence merchandising decisions. The geolocation data which devices like this can capture, can also be interrogated to understand more about how customers shop in a particular store. Not only can you see what customers are buying, future deployments of self shopping devices mean that you can also understand how long they spend in store, which departments they visit and in which order they visit them. This business intelligence can then be used to improve the instore experience, influence key product placements, inform merchandising decisions and ensure device availability.

In addition to post purchase analytics, this same data also has the potential to be harnessed in real time. If you can see where your self shopping devices are in store, you can also see where your customers are. If you suddenly have a build up of devices at the delicatessen or at the checkouts, you can quickly and proactively deploy additional staff to that area to queue bust.

A virtual assistant for every customer

Aside from traffic build up, these next generation of self shopping devices could also help you to identify when a customer may be in need of assistance. For example, say a customer has been stationary in an aisle for a long period of time, this might indicate that they are looking for a particular product but cannot find it. What if a customer service associate could be notified so that they can make their way to that aisle and deal with the potential query? Equally, what if a customer could push a button on the device to call for that assistance themselves, instead of having to hunt for someone to help?

Better still, what if you could provide a virtual assistant for every customer through your self shopping devices? Smart speaker and voice technologies like Alexa and Google Assistant are growing at a rapid rate. While just one in twenty (5%) of Brits owned a smart speaker by Q3 2017, the latest research carried out in Q1 2018 shows that figure has doubled to one in ten (10%)[2]. Using similar technology integrated on a self shopping device, it may be possible in the future for customers to obtain information such as the location of a specifc item from a virtual assistant.

Automating simple enquires as outlined above could save customers and staff considerable amounts of time, however processes like this could and should never replace physical staff. In a world where nearly every consumer has a mobile phone in his hand and with it, instant access to product information, reviews and price comparisons, it is really important to ensure your staff are as knowledgeable and empowered as the people they are trying to serve.

In the next section of this paper we take a look at ways in which mobile computers can empower staff to deliver an enhanced customer experience, while giving them the agility to handle every day tasks on the shop floor.

THE IMPORTANCE OF BEING AGILE

Enabling staff with digital technologies and ensuring they have the skills and training to use this technology effectively must be a priority for retailers who are serious about customer service in the digital era. There are now several devices emerging in the rugged mobile device market that bear many similarities with consumer mobile phones and tablets. These familiarities mainly manifest in the way that users interact with the devices. Providing staff with devices that have more familiar and user-friendly interfaces can pay huge dividends.

The most immediate benefit is that by deploying devices with more intuitive user interfaces, retailers can reduce the learning curve for users. If the use of these devices becomes more intuitive then in turn, the processes and tasks they are being used for are more likely to be executed correctly and productivity is increased. There is also evidence to suggest that devices that more closely mirror a user's own smartphone are more likely to be well cared for while in use.

Fit for purpose and multi-purpose

Despite the ability to operate more like their consumer grade cousins, these devices still possess many of the enterprise class features that retailers have come to depend on from their mobile computing technology including; high definition toughened glass touchscreens, 2D imaging capability, rugged drop specifications, extended battery life and more. By incorporating these enterprise features you can ensure that your mobile technology is not only fit for purpose but that it is multi-purpose.

How many times do colleagues touch the shelf in a typical day? Price checking, picking, gap analysis, visual merchandising and fronting are just a few of the most common tasks that our customers tell us they need to complete daily. However, completing these tasks while the store is open isn't always easy. Staff need to be armed and ready to deal with customer queries one minute before switching back to their task in the next.

Empowering staff with a single device in the aisles that can deal with multiple tasks is a must. By intelligently combining software processes on an easy to use interface this is now possible.

Once device to rule them all

Earlier on in this paper we discussed the possibilities for the next generation of self-shopping devices. However, what we didn't touch on was that in some instances, it may be possible to arm staff and customers with the same devices. Our experiences tell us that 80% of the time self-shopping devices are not fully utilised because the number of devices are often based on peak trading times. So why not enable staff to take advantage of these devices as well? In addition to improving productivity, by sharing your device pool you can reduce the number of physical devices in store, reduce downtime and ultimately reduce costs.

By empowering staff and customers with the same devices retailers can further enhance engagement between the two user groups. Again, by having intuitive devices staff will be more able to assist customers that use the devices for self-shopping and this has the possibility to improve uptake of self-shopping itself.

Regardless of whether you choose to arm staff with the same device as customers or a different one, the key is mobility. With a mobile computer in their hand, staff can come out from back of house areas and move away from the traditional checkout. Particularly in fashion retail, we anticipate that these devices will continue to support the growing demand from customers for mobile payment solutions, allowing customers to purchase products from virtually anywhere within the store.
This is just one example of the way that data capture technology is changing the point of sale as we know it. In the last chapter of this white paper, we turn our attention to what's next for the checkout.

THE CHECKOUT BUT NOT AS WE KNOW IT

The look and feel of the retail checkout has already changed substantially in the last decade. When we hear the word 'checkout', most of us cannot help but conjure up an image of the self-service kiosks that dominate supermarket checkouts. Not surprising as there are now an estimated 50,000 self-checkouts installed across the UK with Tesco alone operating 12,000. Across all genres, retailers are now evaluating how further enhancements can be implemented to streamline the checkout process and improve customer experiences in store.

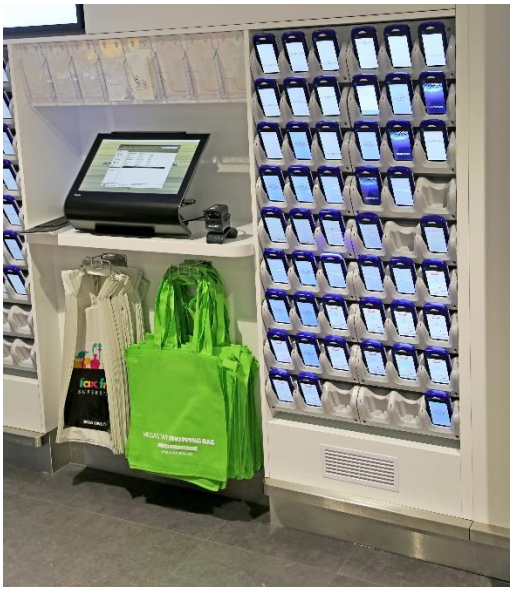
Self-checkout is by no means a new concept but there is no denying that it is still a growing trend within our industry. Many consumers prefer to use the self-checkout lane citing that they like the convenience of it, find it simple to use and consider it to be faster than using a cashier assisted lane. Studies also indicate that as consumers, we perceive value from taking control of the transaction and this sense of increased control can lead to greater customer satisfaction and increased customer loyalty[3].

There's still room for improvement though and we know from speaking with our customers, that consumers continue to desire easier ways to identify and scan produce at the self-checkout. It is an area that Datalogic has been focussed on improving when developing its latest innovation.

EZIGO addresses the occasional problems with item detection using the latest imaging technologies and data capture techniques to drive frictionless transactions, reduce queue times and ultimately, improve customer experiences at the checkout. Customers simply place the items they want to buy on a table and the system automatically identifies the objects and calculates the total price, without any further interaction from the customer. Customers can then pay quickly via contactless payment integrated in the kiosk housing.

Using 3D camera technology it is possible to determine the number of items on the table, as well as their shape and size. In addition, 5 reading cameras capture the image data to accurately identify the items from their packaging, removing the need to orientate items in a particular way for successful barcode scanning. The solution could be a real game changer and enable faster, more accurate transaction processing in environments where customers want to quickly grab a few items and go. Perfect for convenience stores or retail outlets at busy train stations.

As we've already mentioned, the future of the checkout doesn't just reside at what we would associated with the traditional point of payment. Payment could be taken at any location in a store, as long as staff have access to the right equipment. In Denmark, Datalogic customer Inco is using self shopping devices to fully automate the checkout process. Without any form of manned checkout, Inco's Copenhagen store was the first and is, to date, the only fully automated cash and carry. At the entrance to the store, a barrier prevents entry to those without a Joya Touch device, ensuring that 100% of customers are using the self-shopping method.



Once a customer has chosen the items they wish to purchase, scanning them as they go, they make their way to two self-service checkouts with two tills at each to make payment. Instead of having multiple associates waiting at checkouts for customers, one customer service assistant is stationed at the checkout to assist customers with any payment problems. Other associates in the store can then be redeployed to improve the customer experience and provide additional sales assistance.

In September 2018, Amazon announced they they plan to take matters one step further and remove the checkout all together[4]. In a similar way to the Inco example above, initial reports indicate that customers will be required to scan an app on their smartphone to enter the store. Once inside, cameras and sensors will track the items that shoppers pick up and what they put back. This information is then used to bill the customer as they leave the store, no queues, no checkout, customers just walk out.

Many of these concepts would demand big changes in our culture and change the way we shop forever, but many would argue that this level of transformation is what is needed in the retail sector to really achieve the level of experience customers are demanding from the high street.

SUMMARY

There are a wide variety of existing and emerging data capture solutions that have real potential to continue the evolution of high street retail, enhance customer experiences and drive loyalty.

Technology, including Datalogic's own point of sale barcode scanners and mobile computers are a vital enabler to not only capturing customer data but also providing enhanced levels of service and diverse experiences that will encourage customers to come back time and time again. We believe innovative payment solutions including self-shopping will be key to future success, as retailers strive to close the gap between in-store and online experiences and redefine the meaning of loyalty.

In addition to providing customers with technology to enhance their experience, it is vital that retailers find the right balance of mobile computing technology to connect colleagues so that they can be more agile, engage better with customers and improve productivity. This is a challenge that retailers are going to have to take seriously in the coming months and years.

What all of these solutions look like and how they will evolve to deliver evermore frictionless, even automated experiences is a very exciting prospect and one of which Datalogic is proud to be at the forefront.

[1] - Deloitte - https://www2.deloitte.com/uk/en/pages/press-releases/articles/uk-public-glued-to-smartphones.html
[2] - YouGov - https://yougov.co.uk/news/2018/04/19/smart-speaker-ownership-doubles-six-months/
[3] - Self-Checkout: A global consumer perspective - NCR
[4] - Reuters https://www.reuters.com/article/us-amazon-com-store/amazon-to-open-checkout-free-store-in-new-york-idUSKCN1LN2LR?il=0

FEATURED PRODUCTS

Gryphon GFS4400 2D OEM Scan Engine

- Ideal for customer facing scanning at the point of sale
- Top reading performance on 1D and 2D barcodes
- A continuous scan mode captures data whenever a barcode passes into its field-of-view
- Offers excellent performance when reading bar codes from mobile devices
- Datalogic's patented 'Green Spot' technology for good read feedback

Gryphon Series scanners

- Top reading performance on 1D and 2D barcodes
- Image capture and document scanning capabilities
- Ability to scan from a smartphone screen
- Datalogic's patented 'Green Spot' technology for good read feedback
- Suitable for both handheld and presentation scanning

Joya Touch A6

- Multi-purpose device: handheld or pistol-grip options
- Android OS available
- Wireless charging with 'Boost Mode' and versatile locking 3 bay cradle
- Datalogic SoftSpot technology for innovative triggering through touch display
- 4.3 inch FWVGA and QVGA display
- Vibration feature to inform users
- 2D imaging technology
- Datalogic's patented 'Green Spot' technology for visual good-read feedback

Memor 10

- Full Touch Rugged PDA (5” HD)
- One of the first Google “Android Enterprise Recommended” devices
- First wireless charging device with swappable battery (4100mAh)
- 1.5m drop to concrete, IP65 sealing
- OS: Android™ 8.1 with GMS
- 3GB RAM / 32GB Flash
- Screen glass is Dragontrail Pro
- WiFi: 802.11a/b/g/n/ac
- Rear Camera: 13MP Color with auto-focus and flash
- New slim 2D scan engine with Green Spot good read

DL-Axist

- 5 inch HD multi-touch screen with Gorilla Glass 3
- 802.11 a/b/g/n with MIMO technology and Cisco CCX v4 certified
- 3G/4G cellular for voice and data communication
- *Bluetooth*® wireless technology v4.0 with BLE for beacons
- NFC for configuration and pairing
- Enterprise Class Assisted GPS for location-based applications
- IP67 rating and 1.8 m / 6.0 ft drop resistance

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