

# Innovation In Grocery

ANGELA COYLE INVESTIGATES HOW SUPERMARKET CHAINS ARE USING THE LATEST ADVANCES IN RETAIL TECHNOLOGY TO CHANGE THE WAY CONSUMERS SEARCH AND SHOP FOR THEIR GROCERIES.



**I**n March of this year, the world wide web celebrated its 25th anniversary, the advancement having revolutionised the way in which we do our food shopping today. While the greatest technological impact on grocery has come from internet retailing, the explosion in ownership of handheld mobile devices – smartphones, tablets and laptop computers – over the past five years has only enhanced the internet’s popularity and reach among consumers.

We can now receive offers from competing supermarkets in this cut-throat

marketplace at any time and in any place – at home, at work, on the move or in a supermarket store.

“This is impacting retailers’ product ranges on one side, but [also pushing them] to develop intuitive online shopping sites, which are reliable and easy to navigate – this is still a challenge for most grocery retailers,” says Daniel Latev, head of retailing research at Euromonitor International.

The latest emphasis in online food shopping relates to new delivery and order fulfilment options – click-and-collect, lockers

and drive-through facilities located alongside supermarkets themselves and even at third-party retailing locations or transport stations. Convenience for shoppers is key to the success of such retail schemes.

## Targeting The Mobile Shopper

Last year, mobile proved a viable and very important channel for retailers to capture. In the UK, mobile internet retailing (including sales through tablets and smartphones) is now estimated to be 20 per cent of overall retailing. “This is still rela-



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**Neil Major**, strategy director at social media firm Yomago and Communisis.

tively lower for grocery retailers in particular. However, it has prompted most of them to step up development of mobile-optimised websites and creation of mobile apps,” explains Latev.

In his opinion, some of the most interesting advances in the use of mobile phones in stores are the experimentation of augmented reality and the trials with iBeacons. Augmented reality uses a phone camera to present additional information about a product, e.g. iBeacons using Bluetooth technology, which allows for stores to send very targeted messages to smartphones, depending where its owner is located in the store.

Neil Major, strategy director at social media firm Yomago/Communisis, agrees with Latev that iBeacon is an interesting innovation to come into the market this year. As well as enabling retailers to ‘push’ tailored messages onto a customer’s smartphone, iBeacons can also measure if a customer is near certain relative zones – such as proximity with a PoS stand. “If a customer is in the wine department, they could be notified, via an app on their phone, which bottle has the best reviews, or receive a tailored offer, based on their purchase history.”

Nevertheless, such geo-located technology must be approached with caution as “in a post-Snowden climate, location surveillance is something customers are, understandably, concerned about”, he says, adding that retailers need to balance the opportunity to create targeted, bespoke and relevant offers with

sensitivity to the fact that customers do not want to feel their privacy is being compromised.

In this case though, the delivery of messages and notifications takes place through an app which the retailer has access to – most typically one they’ve already provided for the public. “This means the audience for these messages is essentially self-selecting – they’ve already shown an interest in receiving offers and recommendations by virtue of the fact they went to the trouble to install the app in the first place.”

Moreover, given the app can know more about who the user is – particularly by being able to call up other customer information systems and providing new insight of roughly where the user is (allied to the who and what) – there are exciting new marketing possibilities and additional insights that can be collected and delivered. “This technology is hugely exciting for retailers as it allows them to bring together the offline and online worlds in a way which has not been possible before,” Major concludes.

### Combating Showrooming

Increasingly, shoppers are taking out their devices to go online to find the best deals

to suit their budget, even while in a competitor’s grocery store. Offering the same price across all channels is a solution to combating the practice of researching in-store and then going home to buy the item online, which is known as ‘showrooming’.

“Smartphones have brought increased price transparency for grocery shoppers so it’s vital that supermarkets can deliver consistency in pricing both in-store and online,” says Vol Pigrukh, chief executive and co-founder of competitor price monitoring firm Profitero.

The pricing technology company works with many supermarkets across Europe to ensure that they deliver the most competitive prices – and best value to their customers – across both channels. The Waitrose Brand Price Match, which promises that Waitrose customers will not pay more than if they were in Tesco for branded groceries, is a good example of this. “We deliver competitor prices across thousands of product lines every day, giving Waitrose the confidence that they are providing the best prices both in stores and on Waitrose.com.” This intelligence has greatly contributed to Waitrose’s continued sales and market share growth, says Pigrukh.

In an industry first, Profitero is also collaborating with MarketHub and price optimisation provider Revionics to deliver a real-time price display and monitoring solution for supermarkets – helping them to make better informed and more profitable pricing decisions.

Pointing out that it is the first of its kind in the world, Pigrukh explains how “the technology incorporates solar cells into wifi-enabled electronic price tags”, providing supermarkets with a more efficient means of auctioning shelf space for a particular item, as well as providing shoppers with more special offers and discounts.

He says the technology could also be used for smartphones as an alternative to monthly coupons that supermarket loyalty cardholders receive through the post.

“Instead, they could be alerted to offers or discounts on their smartphone whenever they



**Waitrose's Brand Price Match** helps customers to find the best prices

## WHAT GROCERS AROUND THE WORLD ARE DOING

### Lidl Portugal Trials Contactless Payment

Lidl will be the first supermarket chain in Portugal to offer contactless payment at the point of sale.

At the moment, only Lidl stores in the UK offer a contactless payment method. A spokesperson said: "The pilot project will be tested in some stores and should then be extended to all stores in Portugal."

### Tesco Trials IBM App To Improve Store Operations

Currently being tested at a Tesco outlet near London, the innovative IBM application replaces the lengthy process of having to check every shelf for low stock and inconsistencies in displays and log inventory levels manually.

"Delivering a better shopping experience to our customers includes making sure products are well stocked and easy to find," said Mike McNamara, chief information officer at Tesco.

"The IBM application will help us to improve store operations beyond the current manual processes and barcode-based methods."

### Dia's New eCouching Initiative In Madrid

To encourage shoppers to shop online, Dia has launched a unique 'e-couching' station in its Metro convenience store in Moncloa, Madrid.

The 'e-couching' lounge chair is placed in-store where customers can order goods online with a mobile device provided by the company.

### Système U To Roll Out EDI

French grocery retailer Système U is to introduce Electronic Data Interchange (EDI) technology to its day-to-day operations.

The introduction of the software technology aims to improve data quality in the supply chain.



visit a store – which would identify them and their shopping history."

### Arming Shop-Floor Staff

We're hearing more and more about how supermarket chains are issuing shop-floor staff with mobile devices to ensure they can provide shoppers with the latest product information in order to answer all of their queries effectively. A key benefit to this in-store strategy is having the opportunity to drive shoppers to the retailer's online presence, thereby ensuring they 'catch' the store shopper for future engagement, whether that is in a physical store or via the web.

If interacting with a device-bearing member of staff, a shopper can be convinced to sign up to the company's e-zine newsletters, agree to receive deals flyers by post and follow the retailer on social media.

All personal information and shopping preferences gathered on the individual can

prove very beneficial to the retailer for its marketing research. They can then tailor offers to suit a shopper's buying history, social engagement and, of course, the possible future placement of those all-important orders.

Abandoned shopping carts also store a wealth of information on the person, who was searching for particular items, but

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**Mark O'Hanlon of Kurt Salmon**

decided for whatever reasons – pricing, unsuitable item – to leave the site before completing the transaction.

### **Innovation For The iPad Mini**

High-performance image- and laser-based data collection hardware manufacturer Honeywell debuted the Captuvo SL62 enterprise sled, an encasement that transforms an Apple iPad Mini into a customer engagement tool, at EuroShop 2014 recently.

Following on from Honeywell's successful Captuvo line, which includes the SL22 and SL42 encasements for fifth generation iPod touch and iPhone 5 devices, the SL62 helps to employees look up inventory, scan barcodes and securely process payments, increasing customer engagement and improving mobile point-of-sale. Access to transaction data is available via the Web or mobile apps.

Designed for all versions of the iPad Mini, an optional magnetic stripe reader allows associates to check out customers on the spot. “Store employees can now provide immediate answers to questions about product information and facilitate an on-the-spot check-out for increased sales,” says Peter Fehl, vice president of global marketing for Honeywell Scanning & Mobility.

In addition to allowing associates to go “beyond the counter” and engage with consumers directly, the Captuvo SL62 can improve the gift registry process for brick-and-mortar retailers. Now, shoppers can use the device to scan products, look up information and reviews and add products to a registry as they walk around the

store. This customer-friendly design can lead to the potential elimination of gift registry kiosks.

“An enhanced iPad Mini solution is ideal for our retail customers who are already familiar with the Apple iOS and iPad interface,” said Robert Kilby, vice president of sales at Direct Source. “Our customers had great feedback about the performance and experience with the Captuvo SL62 pilot units that Honeywell provided during the development process.”

The manufacturer will deploy more of the devices as mobile solutions continue to expand. Equipped with Honeywell's Adaptus 6.0 imaging technology, the Captuvo SL62 can accurately read most barcodes, including government-issued IDs, coupons or loyalty club barcodes. For more information, visit [www.honeywellaidc.com](http://www.honeywellaidc.com).

### **Growing Sales**

A key way for grocery retailers to grow their sales and profit margins in the online space is to make their websites – whether the consumer is using a PC or mobile device – more intuitive. With over 10,000 products available for purchase at a typical grocery retailer, it usually takes a considerable amount of time to complete one's grocery shopping order online, so

retailers need to find ways to present the relevant products more effectively to consumers so online shopping is as convenient as it is promised.

John Beckett, CEO of ChannelSight.com, agrees that product placement and presentation is essential for shoppers to embrace such technology. “As grocery stores continue working to align the offline and online shopping experiences, providing an opportunity for brands to capture user attention online and keep that attention until the product is in the virtual shopping cart is a key challenge,” Beckett says.

“Lower user attention span and increased willingness to compare product attributes online mean brands need to find a way to reduce competitive distraction in the buying process.” The ChannelSight technology facilitates this by providing a direct, updated and accurate link for brand website users to find their chosen product in an authorised, relevant online or offline retailer and complete their purchase instantly.

“Real-time return on investment analytics enables brands to engage in proactive and reactive pricing and promotion via their partner retailers, resulting in extremely high conversion rates,” says Beckett.

European retailers may soon introduce some of the in-store technology that is helping US grocers to increase market share and gain competitive advantage over rivals. With impulse buys accounting for around 40 per cent of supermarket purchases, innovation targeting such shoppers is key to growing sales and profit margins, says Mark O'Hanlon of retail and consumer goods management consultancy firm Kurt Salmon. The company works with a number of grocers across European.

He believes there are three particular areas that supermarket retailers should consider rolling out across store for growth. “Smart shelves involves using light-sensing technology to detect how long customers stand next to a particular product, whether they pick it up and for how long, and which item they pick up next.” The innovation helps in understanding more about consumer behaviour, and also to assist in managing availability.

“In-aisle tracking is made possible by

**40%**

**Percentage of purchases which are impulse buys**

**20%**

**Percentage of UK retailing done via mobile internet**

**100**

**Number of products Asda's Rapid Scan can do in an hour**

## CLOSING THE INFORMATION GAP

The reduced cost of intelligent digital communication and the use of common messaging and networks for shelf-edge pricing and product information, along with digital displays for advertising, opens up the prospect for supermarkets to "close the information loop" with customers, says David Lowrance, retail industry consultant at Fujitsu UK & Ireland. This is achieved by linking the shopper's smartphone into this circle of data, ranging from price to product information to targeted promotions.

"This would be impossible to manage across the breadth of most supermarkets' products without the technology to link it all together with the customers' own technology," he explains.

The addition of smartphones into the retail technology process opens up a whole new paradigm in supermarket-customer relationships, allowing the journey to start out of store, using shopping lists, electronic, targeted offers and in store promotions based on customer intimacy. "In many ways, this takes the customer relationship beyond that available to a traditional assisted sales process, and speciality retailers are now playing catch-up in their interaction with customers across the multiple touchpoints now available to shoppers," says Lowrance.

sensors placed in key locations that monitor shopping times, what consumers touch and what they put into their trolleys."

The technology can help assess competing promotions or layouts, and its heatmap output will show high-traffic areas, says O'Hanlon. Smart carts are also worth considering, as they let customers to have their online shopping list on a screen on their shopping trolley.

"While they are in the store, sensors on their trolley track their shopping patterns, and show them ads and promotions, based on the trolley's location. They could also show them relevant additional purchases based on the items in their cart - and on their list - and what other customers have purchased in that aisle."

### Augmented Reality

A new mobile app from IBM has helped



Above: Products like this from Honeywell help retailers improve store operations

retailers to improve store operations by allowing grocery staff to arrange items on the supermarket shelves in line with pre-arranged display schemes. Based on IBM's Augmented Reality Shopping Advisor, employees accessing the app on mobile devices can take a photograph of the shopping aisles. By connecting to the supermarket's product database, the app can then identify all items in the image and analyse the current layout and quantities on display. Comparing this to the planned design, the app can superimpose the timely information on what shelf areas need filling and where items have been placed incorrectly in display areas. Staff can also receive an alert of the corrective action.

### At The Checkout

Technology to speed up the checkout process is also high on the agenda. Many supermarkets in Europe have introduced or are trialling such systems, some of which involve the use of mobile phones.

In the UK, Sainsbury's Mobile Scan & Go allows customers to use their phone to scan purchases as they shop so they have a running total of exactly how much they've spent and how much they have saved. The technology trial has been rolled out to a number of stores.

"There's also the convenience factor, as there's no need to unload the trolley for checkout, as shoppers simply scan a QR code at the till and pay in the usual way,"

says O'Hanlon, who believes this is something that could be rolled out further.

Meanwhile, Walmart-owned Asda is trialling Rapid Scan on its main bank checkouts – a 360 degree laser.

At rival Tesco's Watford store, customers are greeted with a 'scan as you shop' option when entering the store and has a dedicated checkout area to go through once completed.

"These 'scan as you go' options could go a long way to remove the customer frustrations at the self checkout."

At the recent Mobile World Congress, European retailers voiced enthusiasm for mobile wallet services being developed in the US by Isis, the joint venture between AT&T, T-Mobile US and Verizon Wireless. Isis launched its mobile wallet service in late 2013 – its rivals include Google Wallet. Ana Maria Llopis, chief executive of Dia Supermarkets, said the Isis partnership approach to mobile wallet services was the right one. For supermarket shop-floor systems, advances in retail technologies will centre on better implementation of the afore-mentioned innovation. This strategy will be coupled with figuring out how to encourage shoppers to use in-store technology more effectively – whether it relates to mobile, tablets, scanning devices or other developments, with the goal being to grow sales while improving efficiency and convenience for both the retailer and the customer. ■

# Catching The Wave Before it Breaks

*JOHN LEWIS IS SETTING UP AN INNOVATIVE TECHNOLOGY HUB, JLAB, TO ENSURE IT CAN FULLY EXPLOIT THE CONSUMER'S GROWING DESIRE FOR BUYING WITH DIGITAL DEVICES.*

**J**ohn Lewis, which includes upmarket store Waitrose in its partnership, was once a fusty old institution that was slow to adapt to the modern world. It took its time to embrace late-night shopping, Sunday trading and, believe it or not, even accepting credit cards. But it did not make the same mistake with the internet. It has exploited new technology and this has paid large dividends – literally, in the case of its partnership structure, for the 91,000 that work there. This year they shared a £200 million bonus!

## The Next Big Thing

But it is still searching for the next big technology idea. “We don’t have a monopoly on all the good ideas about how you can use technology in retail,” says Paul Coby, IT director at John Lewis, referring to JLab. “We are taking John Lewis’s desire to build great British products and put that into great British technology.”

The evolution of European retail is closely tied to innovation across communication platforms and, through JLab, John Lewis is looking to get ahead of the curve. It has partnered with entrepreneur Stuart Marks, who invests in companies specialising in big data, for the incubation project that will provide start-ups with mentors from John Lewis and run from June to September. John Lewis is seeking ideas around in-store innovation and real-time data projects that will provide customers with a personalised service.

John Lewis’s retail director, Andrew Murphy, said the group was looking for



*John Lewis: Its customers value being able to shop by phone, in shops and online.*

ways to better knit together the shopping experience in stores and online, and for new ways to communicate with customers.

“We know customers value being able to shop with John Lewis by phone, in shops and online and anything which enhances or simplifies that experience is of interest to us,” Murphy said. “What I’m looking for from successful JLab applicants is deliverable but which stretches innovation which offers real benefit for customers in both our bricks and clicks businesses.”

The incubation period will run until September with five start-up companies being given office space and advice from other well-known tech entrepreneurs.

“We have crafted something unique in

the UK retail sector that will give businesses access to the best mentors and to an environment where they can develop their ideas,” added Marks. “I’m certain that we will find a new and exciting technology.”

## Leading The Way

John Lewis is on a good run at the moment and is now competing with Marks & Spencer, the traditional UK high street bellwether, after achieving record sales. And the role of understanding technology and how it boosts the consumer journey has been vital. “John Lewis has definitely replaced M&S as the darling of the British high street,” said retail analyst Neil Saunders of Conlumino. “M&S is still predominant – it has more stores and more shoppers – but when you look at new routes to market, such as

online and mobile, John Lewis is light years ahead.”

The JLab project follows in the footsteps of Tesco, which is working closely with the Rainmakers Loft start-up community, while Marks & Spencer has opened an office in east London in a bid to be close to the action. But it is fascinating that John Lewis and Waitrose are leading the way.

“Both Waitrose and John Lewis increased market share for the fifth consecutive year,” said chairman Charlie Mayfield. “There are fundamental changes taking place in retail ... the level of change has at times been challenging, but partners have understood and embraced the need for their business to continue to develop.” ■