9 standout retail technology projects

What are the best IT projects of the last year? Rebecca Thomson takes a look at some of the innovations helping to change retail

The retail sector is moving steadily through a fundamental period of change, and there are many examples of the industry taking steps to improve its offer for ever-more demanding consumers.

As the announcement of the shortlist for the BT Retail Week Technology Awards looms, we outline some of the most groundbreaking technology projects in retail of the past year.

Some are trying out slick digital technologies, while others are addressing the need for sweeping infrastructure changes. But all are symptomatic of the new level of technical prowess retailers need to demonstrate.

Topshop offered a virtual reality experience at its Oxford Circus store

1 John Lewis' JLab

John Lewis' bid to find the next big technology in retail has led to the creation of JLab, which offers the chance to collaborate with the department store retailer. The scheme will enable five start-ups to work with John Lewis IT staff to develop their idea.

IT director Paul Coby says retailers need to work more closely with start-ups. He says: "We don't have a monopoly on all the good ideas. One of the great things in the UK is this fantastic ecosystem of people who are all thinking about how you can use technology. Structuring that and giving companies the chance to contribute is something that will benefit everyone."

It's something others clearly agree with. John Lewis is not the only retailer to court start-ups. Tesco has sponsored the Rainmaking Loft in east London, and held a 'speed dating' event for start-ups in 2013.

2 Topshop's virtual reality headsets

London Fashion Week has developed a reputation for being an event where

"ONE OF THE GREAT THINGS IN THE UK IS THIS ECOSYSTEM OF PEOPLE WHO ARE THINKING ABOUT TECHNOLOGY"
Paul Coby, John Lewis

brands wow using new digital technologies, and Topshop has led the way.

In February it gave its customers the chance to sit on the front row of its fashion show in a virtual reality experience. The Topshop Unique show was live streamed from the Turbine Hall at Tate Modern to a virtual world created by 3D agency Inition at the retailer's Oxford Circus store.

Shoppers could wear the headsets to enter a virtual world, which included a live runway feed and footage of backstage action and VIP arrivals. Cameras recorded the scenes to give a sense of presence at the actual show.

3 Eat pilots beacon technology with Weve

Weve is a joint venture between phone networks Everything Everywhere, O2 and Vodafone, and is their bid to commandeer the mobile payment and loyalty market. In what it claims is a UK first, it is working with food retailer Eat to pilot beacon technology and its loyalty app Pouch.

The technology means shoppers can be sent marketing messages through
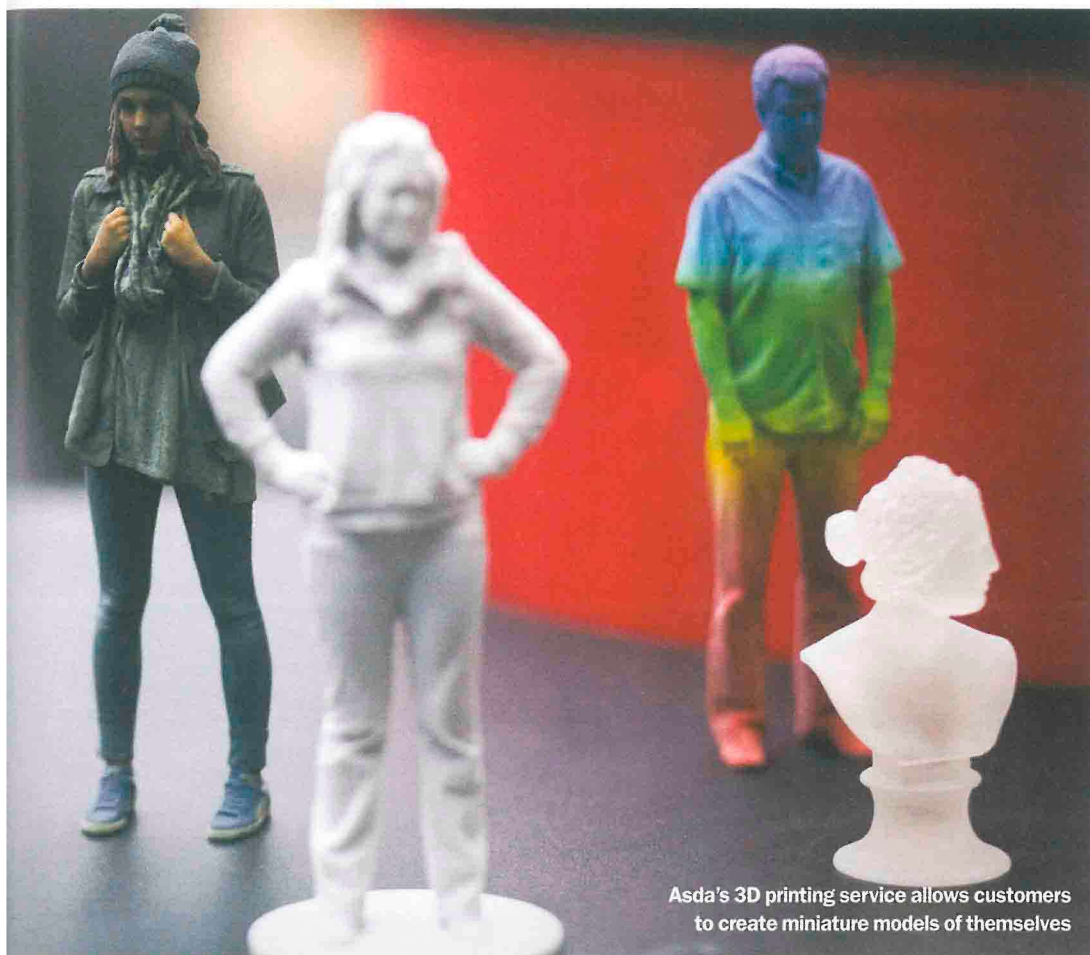

M&S uses a forecasting system to predict when

Asda's 3D printing service allows customers to create miniature models of themselves

ALAMY

7 Asda's 3D printing

Asda's 3D printing service is unique among retailers, and has produced some interesting results from imaginative shoppers.

The service means people can be scanned and then turned into lifelike 3D figures – some come into store in fancy dress, and Asda said one soldier came into a store wearing his uniform so his grandmother, who hadn't been able to attend a medal ceremony, could see him in it.

The service is a great example of how technology can be used to create interest and entertainment in-store.

8 Electronic pricing at Tesco

It looks as though electronic pricing may soon become a common sight in UK supermarkets.

Tesco is piloting the technology and chief information officer Mike McNamara said in December: "The ones we're using now use the same e-ink technology that's used in ebook readers and feedback from customers has been good. That gave us the confidence to trial them in our Letchworth Express store in Hertfordshire."

He says potential benefits are huge. "It's a much simpler system than manually changing between five and 10 million shelf-edge labels every week."

McNamara added: "The other benefit is even more confidence that the price on the shelf edge is correct. When we are changing 10 million labels, mistakes can happen. With electronic labels, pricing information can be controlled from a central system and prices are changed instantly."

their smartphones. Small bluetooth beacons are placed around the store, and communicate with shoppers as they move around.

4 Marks & Spencer's demand forecasting

The performance of Marks & Spencer's food division has gone from strength to strength and the retail bellwether attributes its success in no small part to a demand forecasting system.

The IT system has helped M&S to achieve 35 consecutive quarters of growth in food, and the retailer is now rolling the data-driven system to general merchandise, with the aim of improving stock availability by 9% by 2015/16.

The system uses various types of data to predict demand, allowing stores to more accurately forecast how much stock is needed and reducing the number of mark-downs.

5 Asda rolls out RFID

It looks as though RFID (radio frequency identification) is finally having its time in the sun – after decades on the 'too expensive' pile, things are looking up for the technology.

In January it was revealed the grocer

is rolling out the technology, which essentially means tags are added to products that enable them to be tracked as they move around the supply chain.

Working with supplier Tyco, Asda can now view stock levels on a real-time dashboard that shows staff stock volumes in each store.

It's all part of the at-a-glance stock visibility that every retailer wants.

6 House of Fraser queue busters

House of Fraser's queue-busting technology is designed to reduce the time click-and-collect shoppers wait in-store.

The retailer said in January it was to install the virtual queuing system, which was piloted at its London City store last year, in 15 further shops in the first quarter. It intends to roll out the technology to the rest of the estate by the end of the year.

The system allows shoppers to check-in through a self-service kiosk as they enter the store. Shoppers then receive a text with an estimated waiting time and a link allowing them to check their progress through the queue.

They can then browse the store rather than wait in a queue.

9 Tesco's global network

It is a busy time in IT at Tesco. In January it emerged that the grocer is rolling out a single global network as part of its centralisation programme.

The network provides internet connectivity for its 12 international businesses, and Tesco has rolled it out with supplier Verizon.

Tesco has two separate IT strategies for different parts of the business – some areas, such as head office infrastructure, are being centralised, while others are being decentralised to allow staff to use the technologies best suited to local customers.

The grocer says the new centralised network will enable technology to be rolled out more quickly and cheaply across the entire business.

here will be demand for items