

ANALYSIS

AI in action

The possibilities for using artificial intelligence in retail are vast. **Ben Cooper** looks at how industry leaders have adopted AI to improve how they perform and where it might take us in the near future

The opportunities presented by artificial intelligence are potentially transformative. And far from it being a technology of tomorrow, many retailers are already exploiting it.

The reasons why are clear. A survey carried out by Vista Retail Support in August shows that not only do 77% of UK consumers feel that AI can “transform their shopping experiences”, but that more than two-thirds believe retailers should be doing more to bring the technology into their stores.

But what does that mean in practice? The emergence of new tech tools – and an accompanying lexicon of new words and phrases – means there is much with which 21st century retail boards need to get to grips.

When it comes to AI, ecommerce consultant Susan Aubrey-Cound, a former director of multichannel development and new channels at Marks & Spencer, says there are careful balances to be struck and new customer strategies to be learned. “It’s not just about using tech to increase efficiency or do things at super-fast speed, AI also applies insight and learning for the future,” she says.

‘Teaching’ an algorithm over time means you may have to manage customer expectations
Susan Aubrey-Cound, M&S

“‘Teaching’ an algorithm over time means you may have to manage customer expectations – your new UX [user experience] may not be 100% perfect on day one.”

So where is the retail industry at with this futuristic technology? Retail Week takes a look at some of the most exciting examples of AI in action.

1. AI-powered visual search

Shoppers don’t want to spend hours searching for clothes online, especially on a touchscreen.

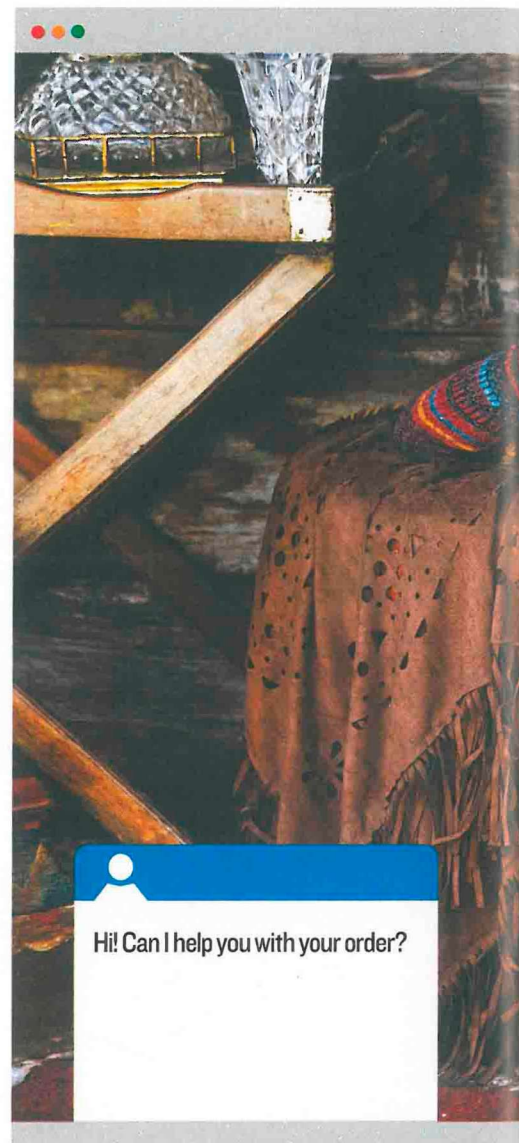
As Aubrey-Cound points out, people like to browse “visually – they don’t want to do it with text”. Cue one of the most important developments in ecommerce to date: visual search.

Instead of suggesting products that are similar only on paper, visual search presents shoppers with clothes that look and feel like the ones they are browsing. Instead of size and colour alone, they can find items with the same style or detail.

Big name retailers are committing to the AI tech that drives it. In the UK, John Lewis has permanently installed Cortextica’s Find Similar technology on its iPad app after a six-month trial.

Others are going one step further. US department store Neiman Marcus’ Snap. Find. Shop feature allows shoppers to upload pictures of clothing items they’ve seen while out and about directly to its ecommerce site, which will then go on to find similar items in its own stock.

While the feature is currently limited by what a retailer can offer from its inventory – and by the varying quality both of shoppers’ photos and recognition software – spotting a stylish outfit and finding it online should soon just be a snap and a few clicks away for a whole range of items.



2. Stock optimisation

There is nothing new about the need to keep shelves stacked and stock up to date. But with stores and warehouses hooked up to increasingly busy and complex ecommerce sites, there has never before been such a need for speed.

With 491 stores, Morrisons decided it needed to get on board with the technology. The solution highlighted one of the most important and potentially valuable uses of AI – replenishment optimisation. The grocer’s partnership with AI specialist Blue Yonder led to a 30% reduction in shelf gaps, for starters.

Taking into account a whole range of factors, including weather forecasts and public holidays – as well as automatically analysing sales and stock data from stores – the system Morrisons uses now makes 13 million stock ordering decisions per day.

Morrisons chief executive David Potts has described the replenishment system as the retailer’s “biggest new initiative” in technology.

German supermarket giant Kaiser’s Tengelmann has also adopted Blue Yonder’s system



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Whether their customers know it or not, some big retailers are using chatbots as live agents on their customer service lines

and reduced its out-of-stock levels to almost zero, according to Kaiser's former head of retail systems and services Mark Michaelis.

The use of this technology is by no means confined to the grocery sector. In fast fashion, where huge volumes of product moves in and out of warehouses barely touching the shelves, the possibilities of automation are many.

3. The use of chatbots today

If you think you can spot a chatbot a mile off, take a minute to reflect on Amazon's customer

service device Alexa. The fact that 'she' isn't real didn't stop more than a quarter of a million of users proposing to Alexa last year. Millions more have happily chatted away with AI chatbot customer service agents – inappropriately or not – as though they were nattering with a human.

Whether their customers know it or not, some big retailers are using chatbots as live agents on their customer service lines and to help steer shoppers to products.

Burberry customers are greeted by a chatbot on Facebook messenger; as are Tommy Hilfiger shoppers wanting access to the Tmy.Grl bot, again through the retailer's Facebook messenger; H&M communicates with customers via messaging app Kik, which uses a bot; and a number of retailers' ecommerce platforms guide shoppers through the browsing process using AI-driven microsites backed up by a chatbot agent.

And while plenty of people will still say they would rather a human being was on the other end when getting in touch with a retailer,

not everyone agrees. A survey by IBM last year revealed that 65% of millennials say they prefer to be greeted by a chatbot than a human agent. So bots are not just a way of cutting back costs on call centres – they are preferred by many users and are more sophisticated than humans when it comes to searching vast quantities of information.

4. Intelligent recommendations

Since not long after ecommerce began to take off,etailers have been offering suggestions to shoppers based on previous purchases. AI takes this to another level.

North Face's platform doesn't just remember what shoppers have bought in the past, it uses IBM's Watson AI to work out what you might need – after all, a stroll through the Peak District and a trek up Mount Kilimanjaro are very different scenarios.

Using AI to process a variety of data about the customer, from the usual characteristics such as height and weight to more specific details such as where in the world they're off to, North Face offers shoppers gear customised for each trip.

It is perhaps a subtle difference from using simple memory, but Aubrey-Cound says it points to a crucial evolution in ecommerce that AI has enabled.

"It's not just about similarity of previous purchases," she says. "If you've recently bought a sofa, being shown another sofa is completely irrelevant."

5. Personalised marketing

AI is not quite in the era predicted in *Minority Report*, where a shopper will be recognised and assisted the second they set foot in a store.

But that is not to say that AI hasn't made it into the real, bricks-and-mortar world. Early versions of shopping apps were little more than a hand-held directory of a mall or even a high street. This is being refined with more intelligent systems that 'guide' shoppers around stores, knowing – thanks to geolocation technology – where they are in a store, backed up by AI to help them find what they're looking for.

US department store Macy's has made some of the most exciting advances in this field. Working with IBM Watson in 2016, the retailer unveiled the Macy's On Call app, the closest thing so far to a smartphone personal shopper.

Customers type in what they're looking for and are then directed by the app to the right place in the store. With time the AI-powered app learns and refines the answers it gives back based on that shopper's individual habits.

With its in-built geolocation, intelligent learning ability, chatbot and visual search functions, the Macy's app ticks a lot of AI boxes.

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