



Retailers get smart about AI

The retail industry's adoption of artificial intelligence has been slow to start, but is full of potential

In the retail sector, initial excitement of the potential for artificial intelligence (AI) to upend customer experiences and radically transform internal operations is giving way to a more mature, measured approach, of considered exploration and adoption.

"Reality has kicked in for retail," says Kees Jacobs, vice-president for the global consumer products and retail sector at global systems integration consultancy Capgemini. "There's been a lot of hype around AI and perhaps some naivety, but we're now starting to see retailers really thinking seriously not only about where the impact and value of AI will lie in their sector, but also what that means for their company in particular, in terms of its positioning, its roadmaps [and] the skills it has at its disposal."

This clear-headed approach is reflected in a recent cross-industry survey, conducted by The Economist Intelligence Unit and sponsored by Microsoft. In this poll, retailers were among the most likely to describe AI as playing a very important part in solving their organization's strategic challenges, and retail emerged as a leading industry when it comes to identifying use cases, running proof of concept pilots and then scaling up the most successful for real-life deployment.

What the future has in store

Among those retailers that have already taken their first steps in AI, the top application is image analysis, used by more than a third (35%) of these respondents. This makes sense, given the role that image analysis plays in online merchandising and inventory management, such as preparing and tagging photos to be sold online, as well as providing recommendations of similar products based on appearance.

But it's also useful for in-store operations, points out Mr Jacobs at Capgemini. For example, a recent report that he co-authored, *Building the Retail Superstar*, described how US-based DIY retailer Lowe's uses image recognition to identify when store shelves run out of products and alert employees to restock them.

Other prominent applications of AI identified by survey respondents include natural language processing (cited by 32%) and virtual assistants (28%), both of which play an important role in customer-facing activities, powering chatbots that answer online queries and other improved, personalized customer service interactions. If a consumer uses a smart speaker in the home to order more dog food from a pet supplies

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company, for example, that retailer might next prompt the customer to buy worming tablets or a new dog coat for winter, based on the retailer's knowledge of and relationship with that customer.

A third of respondents, meanwhile, cite predictive analytics as one of the first use cases that has or will become relevant to their industry. AI is increasingly commonly used in this way in areas such as inventory and demand forecasting, allowing retailers to better analyze from past experience the many complex factors that influence product demand, and operate a smoother supply chain as a result.

Cautiously optimistic

Most retailers surveyed are markedly optimistic about AI's potential for improving customer service: nearly nine in ten (87%) expect AI to improve it somewhat or a great deal. But retailers continue to face a number of barriers in their AI adoption plans.

First is simply meeting ever-rising customer expectations. At a time when customers can easily price-compare and shop around, there is greater pressure on retailers to foster deeper, more personalized relationships with them. "A lot of that comes down to the intelligence embodied in retailer-to-customer interactions,"

says Vish Ganapathy, managing director for retail at Accenture, a consultancy. For example, this could involve an "understanding of the individual customer's tastes and buying habits, pinpointing the best time to approach them."

According to the survey, retailers are notably risk-averse. Nearly half (46%) of those we surveyed are concerned with the costs and risks involved in AI adoption. Only respondents from the government sector are more concerned about these kinds of barriers.

Retailers are also preoccupied with the workforce and skills challenge involved: 41% are concerned about employee reluctance to adopt new technologies or learn new skills. At the same time, the sector is more likely to cite a lack of knowledge/technical skills as a barrier to AI adoption than any other we surveyed, and more likely to point to a lack of proper tools and technology.

The implication is clear: alongside their work on identifying AI use cases and running pilots, retailers could do more to prepare the wider retail workforce for changes ahead and to address skills gaps through underlying investment. Without this vital preparatory work, few retailers will be able to bring to fruition the ambitious projects that initially captured their excitement.