Dixons Carphone Uses an Award-Winning Method of AI to Offer Personalized Recommendations

One of the largest consumer electronics retailers in Europe was recognized with the 'Best Use of AI' at the eCommerce Awards in London. The eCommerce Awards showcase the best online retailers, online companies, agencies, innovators, products and campaigns in the eCommerce industry. The organization beat out several worthy competitors as they use AI to improve retail standards, customer experience, and offer a personalized experience based on previous purchases.

HOW IT WORKS

The organization is a trailblazer in the application of artificial intelligence as they identified a need to provide an intuitive product suggestion journey on their websites, similar to what you find in their retail stores where sales professionals assist customers with product suggestions that might be helpful. Their vision to offer bundles to online customers that are personalized based on what is known about the individual customer became a reality as they began their work with Syntasa. Dixons Carphone's work with Syntasa allowed them to deliver real-time recommendations to drive incremental sales and margin to their business. Basically, when a customer arrives at the Currys PC World (Dixons Carphone brand) websites and opens a product detail page, a query is made to the recommendation API, containing the customer's visitor ID and product ID. This recommendation API then returns personalized or non-personalized bundle recommendations, based on the customer's history on the Currys PC World websites. Personalized recommendations are prioritized when sufficient browsing history is available. When browsing history isn't available, natural (non-personalized) recommendations are served to the customer.

DELIVERING OUTCOMES WITH ML TOOLS

The organization applied mathematical modeling, data science, and machine learning techniques to increase cross-sold products on their Currys and PC World websites. A data science team was created within the organization's eCommerce department to build out a bundling recommendation engine.

Syntasa plugged natively into their existing technologies and within their GCP environment to synthesize behavioral data. To produce personalized recommendations, Syntasa built a Nearest Neighbor model to generate a neighborhood of similar customers, based on browsing behavior and products purchased together by similar customers. The Dixons Carphone team built an algorithm they call Natural Attach to produce non-personalized recommendations. The model was then productionized with Syntasa's Composer app.

"Syntasa has been really invaluable in speeding up our time to value by architecting our Adobe Analytics data and productionizing data science and machine learning modeling at scale, and in such a way that we can confidently pass that into production systems to drive the user experience."

- Paula Bobbett
Head of Online Performance, Dixons Carphone

PRODUCING MEANINGFUL RESULTS

The organization is now able to combine multiple business data sources into their big environment and build machine learning modeling with the data, as well as to pass the modeling outcomes to their activation channels that include their websites, optimization tools, and CRM. As a result of using personalized, AI-driven product recommendations, customers are 3x more likely to add the product to their basket when shopping online. The organization's natural attach recommendations outperformed manually created ones by 1.3x.

Dixons Carphone is currently leveraging their behavioral data to deliver personalized bundling recommendations to provide a customized experience for their visitors and customers.