RSM Discovery 37

Omnichannel retailing: making smarter choices

Interviews with Robert Rooderkerk and Marijn van Weele

Selecting the right assortment of products to carry is a perennial challenge for most retailers. Even for online retailers, distribution centre space and shoppers' mental bandwidth present constraints. Faced with too many choices, the consumer will shy away from buying anything at all.

.....

Until a few years ago, Coolblue, the fastgrowing omnichannel retailer based in Rotterdam, had dealt with the issue of assortment the way most retailers always have: by making decisions about what to carry based on supplier discussions and managers' gut feelings.

But as the business grew, this traditional approach had become unsustainable. In certain departments, shoppers were being inundated with options – nearly 200 kinds of power banks, for example. 'We were basically confusing the customers with a lot of options that for them are very similar. This is not really a good way to help our customers, so we started asking, how can we make smarter choices?' recalled Marijn van Weele, Head of Margin Optimization (Assortment, Pricing, Forecasting, Bid Management).

This sounds like an easy question to answer, but it isn't. In fact, Coolblue faced a dilemma retailers often face: it's easy to cut stock keeping units (SKUs), but what if some of those choices satisfied very particular needs? How could van Weele be sure that the effort to cut complexity wouldn't actually reduce sales?

An introduction

As he wrestled with this issue, a colleague invited van Weele to an evening seminar on assortment planning led by Robert Rooderkerk, Associate Professor in the Department of Technology and Operations Management at RSM.

After the seminar, the two continued to speak about 'our shared passion for assortment related challenges,' Rooderkerk remembers. This introduction began an ongoing dialogue, in meetings both at RSM's campus and at Coolblue's offices. Those meetings 'first focused on Marijn sharing challenges and me discussing state-of-the-art research on assortments,' Rooderkerk said.

Rooderkerk also told van Weele about an analytics tool for assortment optimisation he had developed while working on a methodology to optimise the composition of grocery store assortments. The analytics he developed on that project made it possible to evaluate the precise degree of overlap in the attributes of any two products in a given assortment – for instance, whether two kinds of laundry detergent did more or less the same thing, or had different benefits.

.....

Rooderkerk believed that his tool could be adapted to handle a much larger number of products and a larger number of attributes than those he had programmed it to handle. In theory, Rooderkerk thought, it should work as well for consumer electronics at an online store as for consumer package goods in a grocery store. If he could prove that it worked on power banks as well as it did on potato soup, he could help many companies shrink their overall number of SKUs without reducing customers' meaningful choices.

But he needed real retail data to validate and refine his algorithm – and he realised that Coolblue might be the perfect candidate.

Improvements every day

Their collaboration started small. 'Coolblue has a good motto, which is to try to make a small improvement or at least some improvement every day. And so that's how we started,' Rooderkerk said.

The first tangible product of their collaboration was a joint lecture at RSM on the theory and practice of assortment planning. Rooderkerk also sent a master's student to work at Coolblue on assortment issues, jointly supervised by him and van Weele.

Since then, the two have moved on to more complex and ambitious projects. For example, understanding how to make his tool work for sorting decisions in a complex category, such as laptops, which have more than 200 features.

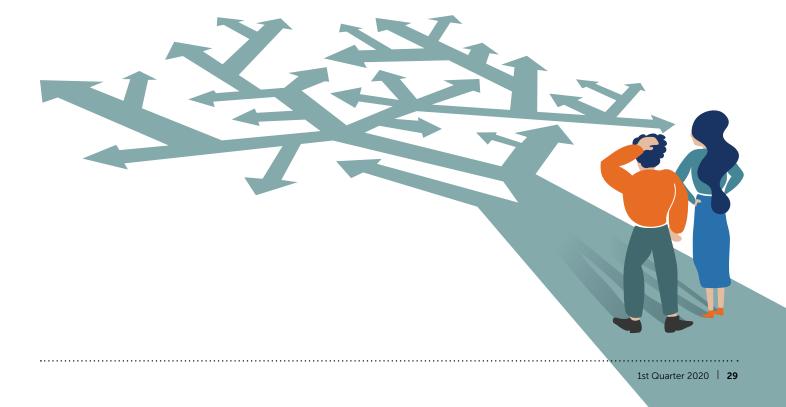
The tool has made a dramatic difference to Coolblue. 'Overall, we have reduced our assortment substantially,' said spokeswoman Ottelien van Pelt, 'both by reducing product types in the assortment and the number of products within a product type.'

In certain categories, such as power banks, van Weele's team has reduced the assortment dramatically. 'However,' van Pelt said, 'there are also product types where we did the opposite and expanded the assortment.'

In laptops, for example, the data revealed that customers were searching for laptops with specifications that suppliers had not satisfied, such as a very high-end MacBook with highly enhanced capabilities. Now, since advising their suppliers about the spots they were missing, they have new hit products that sell out very quickly, said van Pelt. In addition to helping Coolblue improve its efficiency, the Coolblue-RSM collaboration has enabled Rooderkerk to not only validate and extend the capabilities of his assortment tool but to begin working on new assortment tools as well. 'We have looked at other dimensions of assortment structure that, together with assortment size, affect the number of website visitors and conversion,' he said. So far, their research has shown that both the structure of a category's assortment and the number of choices offered matter.

The collaboration has yielded practical benefits to both partners: more sophisticated assortment processes for Coolblue, and several pa"We were basically confusing the customers with a lot of options that for them are very similar."

Marijn van Weele, Head of Margin Optimization, Coolblue





Omnichannel retailing: making smarter choices (continued)

Interviews with Robert Rooderkerk and Marijn van Weele

pers for Rooderkerk - two published, and one under review, on omnichannel assortment planning, marketingoperations challenges in omnichannel retail settings, and finally, the path of new product development in an omnichannel world.

In addition, Rooderkerk, who is also Academic Director of RSM's new MSc in Business Analytics & Management, said he has gained a better sense of the skills that he wants the students in the programme to develop. 'Besides soft skills,'

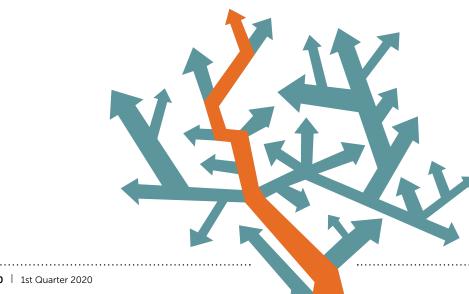
he said, 'they need an agile mindset capable of rapid prototyping, a good understanding of the interdependencies between different firm functions, particularly marketing and operations and different applications, especially assortment and pricing."

Assorted answers

Today, Rooderkerk and van Weele continue to work on the problem of assortment for an omnichannel retailer, and have just begun a project

"Coolblue has a good motto, which is to try to make a small improvement or at least some improvement every day. And so that's how we started."

Robert Rooderkerk, Associate Professor, Department of Technology and **Operations Management, RSM**



using Coolblue's data. Their collaboration is also becoming more central to Rooderkerk's research. Now, he says, he is working directly on the Coolblue research with his colleagues, and not delegating it to his graduate students.

The executive and the academic are thus working together now to try to answer a variety of questions that are important to Coolblue specifically and next-generation retail generally. For example, are the assortment dynamics the same for Coolblue's 11 physical stores as for its online store, or should Coolblue have a different assortment strategy in its physical stores? How does blurring the line between online and bricks and mortar stores affect assortment? What products should Coolblue display in the store, given that space is limited and taking into account the fact that consumers might inspect a product in store but then buy online?

As for the Coolblue-RSM collaboration, the assortment seems optimal: Coolblue has less inventory to manage, Coolblue's customers have fewer but better choices to make, and RSM has new insights into the challenges of assortment and an advanced set of analytics tools that can benefit retailers everywhere.

Robert Rooderkerk is Associate Professor, Department of Technology and Operations Management, Rotterdam School of Management, Erasmus University. EMAIL rooderkerk@rsm.nl

Coolblue WEB www.coolblue.nl