Foto: Getty Images

The Pricing Machine

AI versus human intuition: how data can be
leveraged to increase margins, drop slow-selling products
and respond to a spike in demand for joggers.

S iri, tell me what price I should charge for these joggers. I want to maximise sales and optimise margins.' While it might not be quite as simple as that, algorithms like those from supplier chain specialist Blue Yonder can in theory provide fashion retailers with answers to fundamental questions like this. Bonprix, Best Secret, Orsay, Galeria Karstadt Kaufhof, Takko and other retailers feed different numbers into the AI and big data platform to find ways to make the sales process as flexible, profitable and comprehensive as possible – even in highly uncertain times like today where we alternate between being in lockdown, reopening or a hybrid of the two.

The highly logical artificial intelligence, or AI, should play to its strengths compared to human intelligence in view of the vast amounts of sales data from the past two years as well as questions both present and future. It should outperform the managers who had set prices based on intuition or gut feeling alone, problematic as this was. This is even more so the case in times like these where so much is changing.

That said, the pricing system cannot predict economic shocks like the lockdowns we're currently experiencing right now.
Andreas Nierlich, Retail Sales Director at Blue Yonder, the self-proclaimed global market leader in supply chain technology, believes, 'Once businesses reopen, costly price wars can, however, be avoided, even in the unique situation we're in now, by predicting real selling opportunities, having the right prices and using appropriate sales promotions. Retailers will undoubtedly be better off than if they were to slash prices across the board by 50 per cent or more.' Particularly in the uncertain times like these, the pricing system can help retailers run through different scenarios after reopening and quickly make differentiated price decisions instead of rushing to sell off inventory.

Bonprix, which has 35 million customers in 30 countries, has been working with Blue Yonder for five years. That should come as no surprise considering that its parent company, the Otto Group, was one of the early adopters of AI and an anchor investor in Blue Yonder through a joint venture between the two firms.

Because of the joint venture, 'we were able to automate our manual processes,' reports Folke Thomas, Head of Purchasing/Projects & Systems at Bonprix. 'Since then, dynamic pricing has allowed us to change prices from one day to the next to meet, for example, short-term requirements in profit or inventory management.' As a result, it is no longer necessary to run the changes through the whole organisation and then implement them manually, he adds.

Orsay is a prime example. 'Typically, merchandisers devoted up to 80 per cent of the time they spent pricing items to the markdowns in the past. This process has been largely automated, reducing this to just around 20 per cent. They can use the time they save here to focus more on strategic topics,' says Nierlich.
Many customers also make use of the technical possibilities available to scrutinise their strategies and internal processes. According to Thomas, 'This also helps us determine the products and price points we need focus on and the selling speed we define using lifecycle management when choosing the future assortment of products we'll offer.'

BLUE YONDER X BONPRIX

Andreas Nierlich (left) is Retail Sales Director at Blue Yonder, the self-proclaimed market leader in supply chain technology. The company's machine learning platform is designed to allow manufacturers and retailers to more effectively plan, manage and automate their supply chains. Physics professor Michael Feindt started the AI company specialised on the retail sector in 2008.

In 2018, it was acquired by JDA Software, which changed its name to Blue Yonder in 2020. The company generates roughly $1 billion in global sales from its base of 3,000 customers. Bonprix (Otto Group) has worked with Blue Yonder for five years. Folke Thomas (right) is Head of Purchasing/Projects & Systems at Bonprix.

The company promises real benefits: 'A five per cent increase in the gross profit margin over the entire season is possible in normal times,' says Andreas Nierlich. You can tell he's a talented salesman the second you start talking to him.

He remains positive and optimistic in the face of the scepticism still held by certain German retailers in relation to automated data-driven price changes, especially when the end result could be different prices for different markets and sales channels.
'While the awareness is there, German retailers could stand to be a bit more innovative here,' he says. 'Generally speaking, dynamic pricing is a great tool for retailers and manufacturers, though they do need to have a very clear strategy,' states Nina Scharwenka, a partner at Simon-Kucher. 'If not, major mistakes can happen.' (See interview on page 83.)

The price image of a retailer, according to Nierlich, does not have to change because of dynamic pricing, a topic the company has explored. 'We have enough experience and data – a fact that our customers recognise.'
Bonprix's Thomas concurs. Customers in one country received 'the same prices across all channels. There has been no real pushback against having different prices in different countries thus far.'
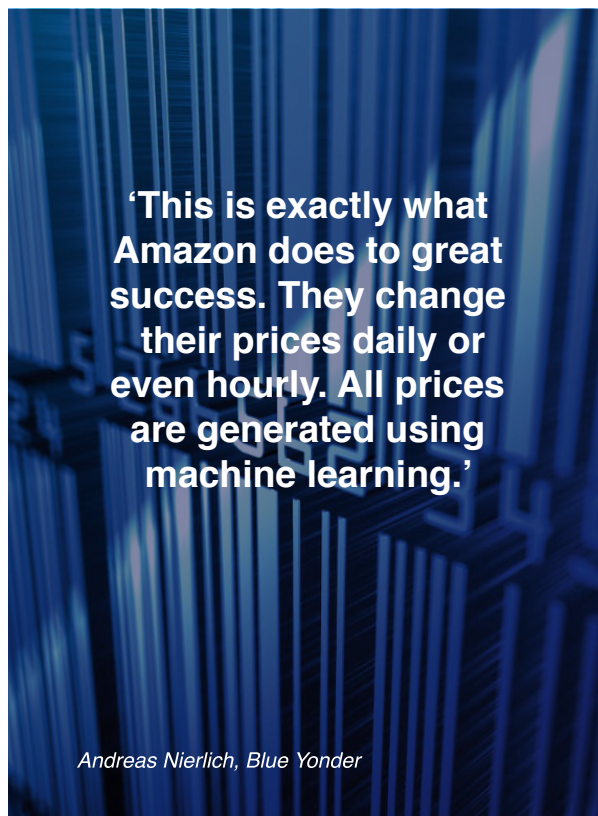
However, some still worry that the worst-case scenario in which fashion retailers compete with the lowest prices – like petrol stations do – could become a reality. This fear is unfounded, according to Nierlich. 'This is exactly what Amazon does to great success. They change their prices daily or even hourly. All prices are generated using machine learning.'

It's time for online and brick-and-mortar retailers in Germany to 'become a little more like Amazon in this respect'.
With that, he doesn't just mean they should be looking to increase their margins. They also need to become faster and more nimble. Bonprix and the first lockdown in 2020 are two great examples. After a long period of little movement, consumer patterns changed suddenly. Dresses were out, joggers were in. 'We needed to rethink our pricing strategy and expand the number of factors we consider,' recalls Folke Thomas. 'We were able to roll out a new strategy in Germany in two short weeks that allowed us to manage prices to overcome supply chain disruptions and the massive shift in buying patterns experienced in the first months of the Covid-19 pandemic.'

'This is exactly what Amazon does to great success. They change their prices daily or even hourly. All prices are generated using machine learning.'

Andreas Nierlich, Blue Yonder

Nierlich also brought up the subject of the supply side shock that occurred. It was difficult to know when shipments would arrive – or they didn't arrive at all. There was a risk that the supply of certain products might run out. This also could have been largely avoided by managing demand using the pricing system.

According to Thomas, everything was back to normal in terms of dynamic pricing by the autumn of 2020. 'It is still more difficult to predict demand, both in terms of what products will be in demand and the amount of demand, which runs counter to what many years of experience had shown. In spite of all this, we were able to meet demand as best as we could thanks to flexible order management.'

That's because, in highly simplified terms, retailers can tell the machine what's most important to them at that moment in data-driven price optimisation. That could be high margins, capturing market share or increasing sales, 'often all the way down to the colour or size of an indi¬vidual product.' Weather, seasonal de-mand, holidays, sales promotions and other influencing factors can also be taken into consideration during machine-based pricing, with different prices set for individual markets, regions or even retail outlets.

On the same day that changes are made to a strategy or price, the platform implements them based on existing data. 'The result is much greater agility.' In most cases, the initial investment pays for itself in six to 12 months. There are very few technical requirements. In addition to product master data and inventory data, what is most needed is sales data from the inventory management system for the previous year or two.