

Price Optimization at Magazine zum Globus

The premium retailer uses artificial intelligence to improve its markdown pricing processes

GLOBUS

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Globus uses Artificial Intelligence to Master the New Challenges of Fashion Retail

The premium retailer makes its markdown pricing decisions with AI-based technology, making it easier for the Swiss company to meet the price expectations of its customers and successfully navigate increasingly shorter trend cycles.

The shape of fashion retail has changed a lot under the pressure applied by online competitors. The classic Spring/Summer and Fall/Winter collections have been brushed aside in favor of much shorter trend cycles. Customer preferences are fast-changing and the permanent “sales” that can be found online are increasing customer anticipation of price reductions. Brick and mortar retailers are especially under pressure in this dynamic environment – forcing them to find new ways to remain profitable.

"Globus is the most fascinating store in the world. We see our customers as our personal guests who we always impress anew through our attentive, courteous, 5-star service, our distinctive aesthetic style in our product selections and store design, our extraordinary attention to detail and our commitment to the highest quality."

This is the mission statement that guides the quality standards at Globus. Customer preference is a much fought for goal in today's embattled fashion market, but those willing to innovate with artificial intelligence (AI) have found a new way to succeed. Even exclusive retailers like Globus have done so, with increasingly shorter collection cycles, fast fashion trends, unpredictable weather, high price and rebate customer expectations, as well as the fight against the expanding number of online retailers.

To ensure its customers shopping in store and online can profit from a consistently connected product range and excellent service, Globus is actively taking on the digital transformation and implementing AI technology to improve its competitiveness in the embattled fashion retail industry.

Determining the right price at the right time for a product is a massive challenge in the price reduction phase. To succeed in today's challenging market, Globus decided to optimize its mark-down pricing with automated decisions made with AI-based technology.



About Magazine zum Globus

Magazine zum Globus AG is a Swiss retailer founded in 1907 and has been part of the Migros corporation since 1997. Under the Globus umbrella, the group operates 13 Globus department stores (Globus), 25 men's shops (Herren-Globus), 36 Schild shops (Schild) as well as an online store. As a premium retailer, Globus values quality, aesthetic and offering 5-star customer service. The goal is to inspire customers with exclusive products that fit their lifestyle and an unforgettable shopping experience. Fashion items make up 60% of its revenues. The company's net sales in 2016 totaled 879 million CHF.

Project Overview

Country	Switzerland
Branch	Brick & mortar and online retail
Challenges	<ul style="list-style-type: none">• Fast collection cycles and short-term trends• Expanding competition from online retailers
Goals	<ul style="list-style-type: none">• Individual markdown pricing at per individual article• Market-driven and flexible pricing aided by automated decisions• Increase customer demand• Higher revenue and profits through bettered margins in sales
Blue Yonder solution	Price Optimization
Range	Weekly markdown prices for a total 120,000 color product combinations
Implementation timeframe	3 months

Results

- Improved margins in sales in new products
- Revenue growth by 10% over the previous year
- Improved EBIT
- Growth in sales volume by 15% over the previous year

Setting the Project's Goals

AI technology from Blue Yonder was first implemented to cover the core product range in the women's department to meet business goals, including sales revenues.

Traditional processes left Globus with high levels of leftover stock that had to be carried into the next season, leading to challenges including additional handling, transport and balance sheet devaluation. Price reductions were not efficient enough to move the product quickly and profitably. The existing process wasn't able to take into account each article in each location. An AI-based markdown process is designed to make informed decisions and optimize prices according to conditions at the time so that they meet the goals as well as optimize the timing.

To determine the best parameters of the new pricing process with Blue Yonder Price Optimization, a pre-analysis was conducted that included the activities of all Globus teams: sales, controlling, planning and visual merchandising. To do so, Globus provided Blue Yonder's Data Scientists with access to the sales data of the last few years. The Blue Yonder solution used this data to simulate various markdown pricing scenarios. As a result of these simulations, Blue Yonder determined that the use of the AI solution could increase sales by about 10%.



The markdown processes are now significantly more efficient with the help of AI technology. Blue Yonder Price Optimization can determine the influence the price has on customer demand and suggests the price that is most likely to achieve the defined goals. The price elasticity is determined by the relationship between the price change and its effect on demand as well as specific sales forecasts by that price according to stock levels in each store. Price reductions are re-evaluated daily and are applied at the predetermined frequency in order to meet customer expectations as well as improve select KPIs. Ultimately, the Blue Yonder Solution resulted in an increase in sales and profits as well as make a noticeable improvement to the gross margin.

The new system quickly proved itself capable of achieving the desired goals, which were even exceeded through a controlled increase in frequency of pricing changes. Here is where Blue Yonder Price Optimization was able to show its greatest strength by being able to consider price changes and markdowns at a granular level, that is: per color of each article.

“With the Blue Yonder solution, we were able to optimize markdown processes and predictably increase our sales and margins. The higher frequency of the price reductions allows us to be much more aligned with our customers’ demands. The automated pricing decisions also relieve our purchasing team of the task.”

Andreas Hink
Chief Digital Officer, Magazine zum Globus

Successful Implementation within a Tight Timeframe

The markdown pricing project was implemented and tested on the entire women's collection within just six months.

After the pre-analysis, a collective project team re-worked the goals. The first phase considered and evaluated various scenarios based on historical data. These data included three years of sales, prices and stock levels for various women's clothing product groups, which were entered into the Blue Yonder system via a standardized Application Programming Interface (API).

Blue Yonder's machine-learning algorithms were designed to consider various key figures (e.g. yield, turnover, overhang, end-of-season value, etc.) and weight them against each other. In the first phase, the system calculated weekly markdown prices for 120,000 per article of each color, which were delivered to Globus over a secure connection. Over three months, the solution and the new process were rolled out to be tested in all stores to be tested under real conditions for a select collection over a single season.

The pricing decisions made by the AI solution were automatically implemented in Globus stores without manual intervention. This required putting a large amount of trust in the system from the beginning – and the success justified the leap of faith!

Project conditions

Globus wanted to stay true to its promise of offering uniform pricing across its stores as well as its online shop. This meant that the price reductions were not calculated per store, but adapted across all stores in Switzerland. Additionally, the frequency of the price changes had to be aligned with the capacities in the stores, which limited the number of changes per week. Price changes in brick & mortar locations have to happen with a high personnel cost and this expense was also considered as part of the cost-benefit analysis of any price change, as well as the effect it would have on sales.

A KPI-based Approach Increased Earnings

Key figures were significantly increased and expectations were exceeded in the live test.

Sales of new products were increased by 8%. The targets set for improvements in sales and the EBIT over the same period in the previous year were also reached. Total sales compared to the last year increased by double-digit figures.

The contributions of the new markdown processes were also included in the GfK benchmark index – and thus receiving secondary confirmation of their success. In the next expansion phase, the accumulated observations allow for even more differentiation between strategy and KPI according to the requirements of each store.

Outlook

Following the successful pilot project, Globus is applying Blue Yonder Price Optimization to the men's fashion collection in all 25 stores. The solution will also be implemented across the retailer's children's collection and accessories department in all Globus department stores.



About Blue Yonder

Blue Yonder, a JDA company, is a leading provider of artificial intelligence (AI) and machine learning (ML) solutions that enable retailers, consumer products and other companies to intelligently transform their operations and make more profitable, automated business decisions that deliver higher profits and optimized customer experiences.

With AI/ML learnings embedded into their core supply chain and merchandising processes, companies can respond quicker to dynamic market conditions and customer preferences, resulting in increased revenues and margins.

Developed by one of the largest teams of PhD-level data scientists dedicated to retail and the supply chain, Blue Yonder's AI/ML solutions deliver more than 600 million intelligent, automated decisions a day.

Blue Yonder was founded in 2008 in Karlsruhe, Germany, by former CERN scientist Professor Michael Feindt and acquired by JDA Software in 2018. The company has received numerous awards, including the Experton Big Data Leader Award 2016, the BT Retail Week Technology Award, the IGD Award 2017 for Supply Chain Innovation.

Blue Yonder provides its solutions through Microsoft Azure and was named one of Microsoft's retail partners of the year in 2018.

Blue Yonder

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Blue Yonder GmbH

Ohiostraße 8
76149 Karlsruhe
Germany

+49 721 383117 0

Blue Yonder Software Limited

19 Eastbourne Terrace
London, W2 6LG
United Kingdom

+44 20 3626 0360

JDA Software

15059 N. Scottsdale Road, Suite 400
Scottsdale, AZ 85254-2666
United States

+1 833.JDA.4ROI

+1 833.532.4764

info@blue-yonder.com

blueyonder.ai

jda.com

info@jda.com

BlueYonder
a jda. company