Bison Schweiz AG

specializes in developing innovation solutions for retail and other industries, including warehouse management and logistics. The company’s ESL Manager product provides one of the first hardware-agnostic electronic shelf labeling management platforms on the market, capable of integrating ESL devices from multiple vendors into a single coherent solution.

Business challenge
Bison Schweiz AG (Bison) set out to show retailers how they can use electronic shelf labels not just to automate pricing processes, but also to improve the customer experience.

Transformation
Working with IBM, Bison integrated localized weather data into its ESL Manager solution, creating labeling that responds to changing weather conditions to advise shoppers about smarter purchases.

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Business benefits:

Enhances the shopping experience with instant, situational insight into products

Encourages customers to buy now, reducing the risk of missed sales

Up to 3x faster return on investment in ESL technology by increasing average basket size

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Bison Schweiz AG

Harnessing IBM Cloud to help retailers make the right offers—whatever the weather

Bison Schweiz AG specializes in developing innovation solutions for retail and other industries, including warehouse management and logistics. The company’s ESL Manager product provides one of the first hardware-agnostic electronic shelf labeling management platforms on the market, capable of integrating ESL devices from multiple vendors into a single coherent solution.

"By integrating IBM Weather Data for Advanced Analytics into ESL Manager, we can potentially help retailers achieve return on investment three times faster.”

Erik Haas
Product Manager
Bison Schweiz AG

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Building a dynamic in-store environment

If you want to understand how an entire industry can be disrupted by new technology, retail provides one of the clearest examples. The rise of online retailers has created enormous challenges for brick-and-mortar stores, as many consumers now see online shopping as their default option for the majority of their purchases.

However, traditional retailers still have one unique advantage that no online competitor can match: physical presence. When you visit a store, you can hold a potential purchase in your hands and experience it directly, instead of just looking at a few photos. And if you decide you want to buy it, the product is yours as soon as you’ve paid for it—you don’t need to wait for the logistics to catch up with the transaction.

For brick-and-mortar retailers to level the playing field, they need to maximize these benefits of physical presence, while minimizing the advantages that online competitors have in other areas. For example, for an online store, changing the price of thousands of products is trivial; for a physical store, it means sending employees to update price labels on every shelf. Similarly, online stores can easily provide shoppers with detailed product information, as well as reviews from other customers to build credibility; physical retailers must rely on having knowledgeable, motivated employees available in-store to provide advice.

Bison Schweiz AG (Bison) was one of the first companies to realize the potential of electronic shelf labeling (ESL) systems to help physical retailers bridge the gap in these areas, as product manager Erik Haas explains: “The time is ripe for retailers to replace paper price tags with electronic shelf labels, which enable brick-and-mortar stores to update their displays whenever the retailer wants to show the customer some new information.

“The first obvious use case for ESLs is to manage price changes. For a retailer with 20,000 items in stock, it’s not uncommon to have to manage around 3,000 price changes per week, which adds up to hundreds of hours of work for the in-store team. That means you have the equivalent of two or three employees in each store who are just working on price labels, instead of more valuable customer-facing roles.

“However, price management is just the beginning. We wanted to show our clients that our ESL Manager solution can do more than just save time—it can transform the entire in-store experience and give physical stores a decisive advantage over both online and brick-and-mortar competitors.”

Unleashing lightning-fast insight

The Bison team saw an opportunity to take electronic shelf labels to the next level by integrating a new type of data into its ESL Manager solution: weather.

“Weather is a key factor in the sales of all kinds of products,” says Haas. “It’s not just about selling ice cream in summer and soup when it’s cold outside. Some products have a much subtler relationship with the weather, and we wanted to help our clients exploit that fact.

“For example, if you are a gardener, you don’t want to fertilize your roses when it’s too cold, too hot or too dry, because it can damage them. So, if a customer is in store mid-week, and it’s the beginning of spring, and we know there won’t be a frost and the weather will be nice at the weekend, that’s an ideal time to remind them that their roses need attention, and prompt them to buy a bottle of fertilizer.

“Traditionally, to give customers this kind of advice, you would need your in-store team to be real rose experts,
and that’s just not realistic at scale. But by combining electronic shelf labels, accurate weather data, and a sophisticated business rules engine, we can make this an everyday part of the shopping experience.”

The Bison team was already working with IBM on some other projects, when it heard that IBM had acquired The Weather Company, and would be making high-precision weather data available as a service in the IBM Cloud™.

“We were delighted to hear about the IBM acquisition, because we wanted our new service to be backed by a brand that our retail clients would know and trust,” says Haas.

“We also needed the weather data to be as accurate as possible — after all, if you promise your customers good weather for gardening, and it’s not, they might not trust you again! The Weather Company’s high-precision forecasts give us exactly what we need. For example, in Switzerland alone, they have 7,500 weather stations in an area of about 40,000 square kilometers — which is about one station for every five square kilometers. That kind of resolution means that you can really localize your forecasts to the neighborhood of each individual store.”

The new version of ESL Manager, augmented with IBM® Weather Company Data for IBM Cloud, is currently being tested by 2,000 stores across several major retailers — and will soon be available to all Bison clients.

“A key advantage of working with IBM Cloud is the ability to scale,” says Haas. “Our clients are currently prototyping the system with just a few hundred products, but we have 20 million labels on our platform and we expect to have 100 million in the near future. As we start to scale up — and particularly as we start to collect data and perform deeper analytics into the relationship between weather and sales — IBM Cloud infrastructure could become a compelling platform for large-scale deployments.”

**Keeping customer service on the sunny side**

For retailers, the new weather data integration in ESL Manager offers a host of exciting possibilities to strengthen customer relationships, boost sales, and improve inventory management.

“Some of our clients have already seen good results with product lines such as cut flowers,” says Haas. “People don’t buy flowers when it rains, so if a rainstorm is forecast, you can start a promotion to try to sell out before the bad weather hits. There are also clear advantages for products such as fans, ice boxes, barbecue equipment, and, of course, umbrellas!”

Looking at the bigger picture, the solution can help retailers do much more than just optimize pricing for weather conditions. It can help to give customers the sense that a store is a place for more than just selling products — it’s a hub where people can come for advice.

“Retail is such a competitive industry that you can’t always afford to have enough salespeople on the floor to answer every customer’s question,” says Haas. “Instead of making them wait until an assistant becomes available, ESL Manager lets retailers be proactive and dynamically provide useful information about each product. Instead of a customer becoming frustrated and walking out of the store without buying anything, you can give them all the insight they need to make the right purchasing decision, before they even ask for it.”

Weather data is a key part of this mission, but the Bison team sees it as just the first step.

“We’re interested in exploring artificial intelligence and augmented reality
too—and products like IBM Watson® Visual Recognition are particularly exciting for us,” says Haas. “For example, we could use an app on a customer’s smartphone to recognize the products on each shelf, and indicate the items that are on their shopping list. Or if a certain product is out of stock, we could use mapping services to show the route to the nearest store where it’s available on the ESL display.”

He concludes: “Today, many retailers are on the verge of investing in electronic shelf labeling as the next step in modernizing their business. By integrating IBM Weather Data for Advanced Analytics into ESL Manager, we can potentially help retailers achieve return on investment three times faster—enough to build a very strong business case for ESL adoption.

“As we continue to work with IBM to add innovative features and services to our platform, we are confident that we will soon be seeing ESLs in a much wider range of stores—and that consumers will benefit from a much richer and more rewarding in-store experience.”

“In Switzerland alone, The Weather Company have about one weather station for every five square kilometers. That kind of resolution means that you can really localize your forecasts to the neighborhood of each individual store.”

Erik Haas, Product Manager, Bison Schweiz AG