BSN Sports
Team Art Locker
A Symfony - and React - Based Architecture to Replace an ERP Platform, External Databases, and Engineering Tools

The company

BSN is the largest manufacturer of custom sporting apparel for high schools in the United States. If you’ve ever seen a high school sell T-shirts with their logo on them, or you’ve seen a high school with really nice uniforms, there is a very high chance that BSN Sports produced them. BSN Sports produces all sorts of apparel and accessories, from T-shirts to sweatpants to football jerseys to water bottles. They can even take footballs and engrave them with a laser.

The issues

BSN recognized a need to convey and support the depth and variety of what it has to offer and needed a platform to support its sales team more efficiently. And while that served as a
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necessary and understandable starting point, the end results became so much more: An experience.

From a technical point of view, BSN needed to **re-platform its current applications on the Symfony framework** and was looking for consulting services to assist with the architecture and implementation of the base framework. That is why BSN contacted SensioLabs, the creator of Symfony, and subsequently referred Unleashed to partner with SensioLabs on the re-platforming.

The solution

**Architecture Workshop**

- Dividing your project to determine and prioritize functions
- Evaluating risks and major project issues to tackle
- Architecture software (Symfony, Bundles, other solutions), interaction and responsibility of bricks to gain optimal functionality of the application
- Proposal of different scenarios for long-term technical architecture that is scalable and secure
- Defining the optimal solution

The story

First, SensioLabs organized an **Architecture Workshop** with BSN to audit the current applications and define the migration roadmap. Then, SensioLabs joined forces with Unleashed to co-architect and develop the BSN sports application in Symfony and React as a fully-featured product creation application, featuring several **powerful customization tools that allows sales professionals to filter, select and customize products**.

SensioLabs and Unleashed developed BSN business functionalities for the administration interface and the front-end application using REST JSON APIs. Our mission was to import the old system data into the new model, to make several APIs communicate with each other, to ensure (1) the performance of the applications and (2) the security of access to resources.

The system was devised to make literally thousands of options intuitive for the user, while Unleashed’s use of Verge3D to create and render products in 3D makes them feel real from the outset. Sales pros can add pre-made or customized designs featuring the customer’s colors, fonts, and mascots. They can also commission the creation of these mascots and logo icons from professional artists through the system by using an “Art Request” feature.
After a mascot and colors are chosen, sales reps can finalize the product using a powerful customizer tool, which allows them to modify the base product, designs, colors, text content, size, location, rotation, color logic, the mascot itself, and more. After this, the product ultimately goes into the client’s sales pipeline, and the rest is history.

Unleashed and SensioLabs built this tool as a headless Symfony app that uses a React front end. This approach enables an advanced level of customizability, so Unleashed can deliver just about anything the client needs. **It was designed to be intuitive even while maintaining numerous API connections to data** on nearly every high school in the country, including location, team name, logo, colors, and more. Quality control is paramount, and the development environment leverages multiple automated testing tools, including PHPUnit for back-end code and Cypress for front-end testing.

With the Team Art Locker application, a BSN salesperson is empowered to go into a school, sit down with a coach, and work with them to design and create all of the custom branded T-shirts, jerseys, or any other accessories they might need. They can also help the booster club put together a fundraiser, where they spin up a customized online e-commerce site called My Team Shop, and sell products in a range of colors and sizes with the school’s art on it. These stores integrate with BSN’s SAP Software, which allows the rep to choose bundles of products or specific customized products. It also supports customized pricing or margin control on a very granular basis.

With expansion in mind, **the tool was built to support worldwide growth**, even though the client is currently only based in the United States. The tool is designed to remove as much of the logistical back-and-forth as possible from the process, to better empower both sales reps and the schools they support to transform what used to be an onerous process into one that is efficient, creative, and even fun.