

### **Case Study #3: Automated, Integrated E-Commerce Platform – B2B and B2C**

**The Client:** An online merchant, selling custom branded apparel via a drop-ship, print-on-demand vendor-partner.

**The Problem:** The client was moving into the business of selling print-on-demand apparel, away from a traditional inventory warehousing model. After deciding on a print-on-demand partner and uploading their designs, the client needed a new online storefront, integrated with the vendor-partner, to allow for automation of product updates, customer shipment notifications, and orders forwarded to fulfillment automatically. The client was unsatisfied with the available web integrations offered via the vendor-partner, for a variety of reasons, namely: poor performance/too slow; poor usability of the seller-side UX; lack of customizability/ optimizability; high recurring cost-to-use.

**The Solution:** After going through strategic discovery with the client, Easy Day LLC proposed to develop a custom online storefront, with back-end integrations with: the vendor-partner; payment-processor; CDN for image optimization; email provider; and socials. This combination of integrations would provide not only a fast, custom-branded, conversion-optimized storefront, but also allow for 100% automated, completely hands-off marketing and sales going forward.

**The Result:** The custom-developed storefront code resulted in load times of <1 second for the store's pages in the web browser, even with high-res product images and on a mobile device (compared with 6+ seconds the client had experienced with their Shopify integration), with a concurrent reduction in bounced traffic and corresponding increase in conversions. The custom storefront allowed for a variety of direct, on-page CRO tactics in addition. A custom-tailored seller-side control panel greatly simplified the client's UX when managing and updating their product information and images. The numerous integrations allowed the client to sync products, market to socials, capture payment, submit orders to the vendor-partner, and notify customers of their shipments, seamlessly and automatically, 100% hands-free.

**The Tech:** The public-facing storefront was deployed on a Virtual Private Server, and accessed via web browser. The seller-facing management console was deployed on a fully separate server and domain, and protected via 2FA, for maximum security. The back-end CMS comprises a relational database (MySQL) and Easy Day LLC's own proprietary, lightweight CRUD framework, using object-oriented PHP with PDO for efficient database operations. Both storefront and management console are routed and served via PHP script. The UX consists of custom HTML5 and vanilla JavaScript, and the images are hosted and delivered via CDN, with delivery format and size optimized on a per-device basis. API integrations include the vendor-partner, various social media platforms, the payment processor, an email provider, and the CDN for images.