Allied Beverage Builds Award-Winning E-commerce Solution Using Zend Application Development Software on IBM i

Business Agility in the Beverage Industry

Allied Beverage Group, LLC is New Jersey's largest and most comprehensive wine and spirits distributor and ranks among the ten largest such distributors in the United States. The company was formed in the late 1990s through a merger of three wine and spirits wholesalers that had dominated the statewide industry since the 1930s. Allied Beverage attributes much of its success to superior customer service and early adoption of technologies that support business agility. Among these technologies are IBM i and Zend PHP.

“Companies in our business don’t compete on price,” said Brian Margolies, CIO at Allied Beverage. “We all file our prices monthly with the state. Service is the market differentiator. To strengthen our leadership position we wanted to deliver the best service by being the best in e-commerce.”

When Margolies first joined Allied Beverage, IT was operating in a decentralized environment using AS 400 and older RPG languages going back to System 36. His mission was to centralize and integrate IT operations.

“The previous application development strategy for managing distribution processes had become unwieldy, expensive and inadequate to meet corporate goals. Earlier attempts to build an e-commerce application based on .NET and Windows Servers involved reinventing RPG business logic that had been developed by the IT staff over decades. Data synchronization had become a persistent problem, and the development environment was fragmented, which made it impossible to work cohesively.”

Choosing PHP on IBM i to Power e-Commerce

Allied Beverage refocused the project and moved efforts away from .NET to its IBM i system. Meanwhile, the company’s IT group discovered that Zend had launched the first implementation of PHP for the IBM i (i5) platform. Margolies formed a new team, including Strategic Business Systems (SBS), to build the eBusiness application. Zend PHP became a cornerstone of the Allied Beverage strategy for web design, development and deployment, while SBS and lead developer Alan Seiden brought expertise in developing applications on IBM i using Zend PHP solutions.

“We envisioned eBiz as a PHP-based application that would automate many of our processes and drive more business interactions online, through an easily navigable system. eBiz would in turn empower our sales reps and retail customers with self-serve access to order entry, our product catalog, inventory and delivery information, transaction histories, and sales-advertising promotions.”

When a large national customer, Darden Restaurants, approached Allied Beverage to trade data via electronic data interchange (EDI), Allied and SBS were swift to respond.

“With Zend PHP and IBM i, we had the right technology platform in place and were prepared to deliver a significant value-add to one of our best customers. We collaborated with Darden for their iKitchen electronic ordering system, including rapid response to specifications for exchanging XML transactions. By automating order entry, we could assure Darden of the best possible deals and

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timely deliveries to their many restaurants. It was a win-win for everyone, and it set the stage for us to integrate iKitchen with our eBusiness application down the road.”

Using Zend PHP solutions to develop the eBiz application on the IBM i, Margolies’ team was able to integrate and run everything on that same IBM i system. eBiz became a one-stop information center with an external website and internet portal, all integrated with a common look and feel to serve both salesforce and customers.

Productive Development and Smooth Integration

The team developed eBiz using the Zend Studio IDE, built the application on Zend Framework, a lightweight open-source application framework, and ran deployment and testing with Zend Server. It was a highly productive approach because the Zend tools and framework are tightly integrated. They took advantage of Zend Server’s Code Tracing and Opcode Caching to monitor and performance-tune the e-commerce application and analyze results along the way.

“We created single sign-on access, so users can log-in once and utilize different parts of the system. We authenticate to Windows AD through LDAP, which is well supported by PHP and Zend Framework. Using Zend PHP enabled us to connect and customize our interactions with the UPS RoadNet transportation management system. RoadNet tracks our real-time delivery data for an average of 75 trucks per day making hundreds of stops to individual customers. Now our customers and sales reps are just one click away from tracking deliveries in progress.”

RoadNet’s Oracle database and services run on a Windows Server. UPS created a RoadNet API based on the SOAP cross-platform Web Services protocol so customers like Allied can depend on their applications even if UPS changes their database’s implementation in the future. Allied’s IBM i is the “client” that accesses RoadNet’s API, aided by PHP’s robust SOAP support and made even better by Zend Framework.

“Transportation management is a huge factor in our success. Our ability to quickly extend and customize our application to automate transportation management was made possible because we chose Zend PHP solutions. Here too, we leapfrogged the competition in terms of working functionality.”

“Now we can bring up scanned images of key business documents, such as proof of delivery and the like. The Zend Framework-based application retrieves images from the Windows-based document server and creates a single PDF for the user to print. A simple operation like this used to require time-consuming phone calls, emails and faxes between departments to coordinate.”

“The Zend Studio IDE gave us a quick start in creating a Zend Framework project. Zend Studio’s built-in Content Assist helped us code faster and avoid common mistakes developers can make in PHP, and move into production faster with more confidence in the reliability of our application.”

“Zend Server for IBM i gave us access to valuable RPG business logic so we could leverage it by calling RPG programs. As we scale eBiz to support more users including customer service, Zend Server’s monitoring and Code Tracing give us the ability to analyze and maximize performance as we go.”

Speed, Flexibility, Innovation and Cost-savings

“Overall, going with PHP and Zend provides us with speed and flexibility at a low cost. In terms of performance gains, we’ve doubled the speed of eBiz thanks to Zend Server and Zend Framework. Our team can innovate and take full advantage of the IBM i while leveraging Web 2.0 concepts and functionalities that would’ve been prohibitively expensive before we had Zend Framework.”

“Our team took eBiz live in 2009 with phase I order entry, and then launched full Web capabilities in phase II with customer service. All of this was accomplished within a year from concept, requirements, design and development to roll-out. Already, 70 percent of our sales force is competent with eBiz, and more than 130 retailers are registered users. In essence, we revolutionized e-commerce in our industry.”

“We’re not reinventing the wheel anymore. With Zend’s integrated solution, our development, QA, support and business analysts are able to collaborate. Running PHP on IBM i, new requirements can be accommodated easily. For upgrades or tuning, backup procedures, recovery and server-wide activity, there’s no need to duplicate operations using other servers. It is all handled efficiently within the IBM i operating environment, which saves us a lot of time and money.”

“Our use of PHP and Zend technology allows for clean, navigable application design. Customer feedback tells us that eBiz delivers the intuitive online experience associated with large commercial sites like Amazon. For example, full-text product search extends across the entire catalog, so reps no longer need to know exact product names or descriptions in order to locate them quickly on our site. All this promotes productive, successful transactions between our reps and customers.”

“Allied Beverage is better off as a result of our Web application development project. We now lead the New Jersey wine and spirits industry with what is in our customers’ eyes the industry’s best Web site. In fact, eBiz was one of the first Zend Framework applications built on IBM i, and it won the 2009 IBM COMMON Innovation Award for Best Web Solution.”

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“Our work with Darden is a model for automating business processes with other customers, so our successful innovation with Zend PHP on IBM i represents a huge win for us.”