



CASE STUDY

MODERNIZING IBM i: APP CREATION
WITH VALENCE NITRO APP BUILDER

INDUSTRY

CONSUMER PRODUCTS



Worldwide Producer and Marketer of Luxury Collectables Scores Multiple Wins by Modernizing its Custom IBM i Applications with Valence

NITRO APP BUILDER: THE LOW-CODE PLATFORM FOR MODERN IBM i APPLICATION DEVELOPMENT



Dan Mastroianni is Vice President of Information Technology at MBI, a worldwide producer and marketer of collectible books, jewelry, commemorative coins, and other luxury collectable products. Because of the highly specialized nature of MBI's many business units, the company's ERP applications were custom-developed in RPG and CL over the course of 30+ years by Dan and other programmers at MBI.



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Dan was looking for ways to implement new user interface (UI) functionality for the company's home-grown ERP applications running on IBM i, but that was only the start. His larger goal was to find ways for employees and management to more efficiently do their work with these applications while reducing the company's dependence on RPG programmers like himself and others on his team, who were eyeing retirement. It was a tall order.

"Creating new functionality using RPG in our ERP applications can be very time-consuming, and I wanted to find ways to more quickly bring on new capabilities that utilize the valuable data contained within these applications," says Dan. "I wanted to move the company away from green screens, but I didn't want to simply implement a screen scraping tool because of their rigid nature. That got me searching for ways to modernize our UIs while also giving me a framework upon which I can rapidly develop and deploy new functions."

PHP AND JAVA PROVE TO BE TOO EXPENSIVE AND TIME CONSUMING

Dan initially looked at using PHP and Java to create what he wanted, but he quickly discovered it was going to be too expensive and time-consuming. Then he learned about JavaScript-based tools that could be used in a framework with pre-built components. He was intrigued with this approach, and it got him looking at vendors who could provide this within a familiar IBM i-based environment, so it would minimize the learning curve for him and his team.

"What I found initially was too much like a screen-scraping type of solution," says Dan. Although these might get me to some UI goals faster, I wouldn't get many of the tools I wanted to create new apps from our data. After digging further into options on the market, I discovered Valence from CNX, and I immediately saw that it was different."



Valence is a low-code, application development platform that includes a full suite of development and runtime tools for creating and deploying truly modern applications on IBM i. Designed from the ground up for IBM i and the DB2 database, Valence makes it possible to quickly enhance existing RPG functionality through the creation of new apps and dashboards. Featuring a responsive interface that delivers an optimized runtime experience for desktops, laptops and mobile devices, Valence runs entirely through an IBM i-integrated Apache server—no additional servers or hardware are required.

Before buying Valence, Dan put a trial version of the product to the test by attempting to recreate one of the PHP applications he had created during his earlier explorations of PHP and Java.

"I was curious how long it would take me to recreate the same app with Valence," says Dan. "Within 10 minutes, I created an app that had around 70% of the functionality of the same app that took me many hours to create with PHP and Java. I was sold."

After purchasing Valence, Dan's first priority was to use it to modernize the customer order system and, in the process, consolidate two of the company's operating divisions within this modernized approach.

CUSTOMER SERVICE SYSTEM RAPIDLY MODERNIZED

"Within about a month, I was able to create a significant portion of the extensive order management functions I was envisioning," says Dan. "I had a whole bunch of lookup capabilities and had integrated a payment processing application. I was pulling together data from different systems. I was amazed at how quickly I got this created with Valence."

"When we completed the modernization of our order management system, one of the big wins we discovered was that new hires in the customer service department were able to learn the system considerably faster," continues Dan. "Because of the intuitive nature of the user interfaces we created, our new customer service employees could be fully productive within two days, whereas in the past, it often took two or more weeks to get them up to speed using green screens."

Another area of increased productivity was realized in how people within the customer service department used reports to solve problems and keep orders flowing efficiently.

"We used to generate huge numbers of 200-to-300-page 'action item' reports every day that an entire group in our Customer Service department worked from all day long to keep orders moving," says Dan. "With Valence, I fed the required data into icon-based, online apps that automated much of the work for them. The end result was that instead of having these folks work from these reports all day long, they blasted through the needed actions by 9:00 or 10:00 A.M. every day, which freed them up to do a whole bunch of other high-value tasks."

Valence not only boosted employee productivity by replacing reports with apps, but it also significantly improved the overall performance of the company's IBM i systems.

BIG IMPROVEMENT IN SYSTEM PERFORMANCE, LESS RELIANCE ON RPG DEVELOPERS

"By changing the way that data was used for reports, we saw an immediate performance benefit," says Dan. "And it's not just reports, Valence has improved overall system performance in many ways. The ability for us to separate the business logic and screen logic from the database, meant that we could move large portions of ERP functionality into applications created in Valence and save large amounts of CPU cycles on our IBM i machines."

Prior to implementing Valence, Dan had been facing a growing concern about what will happen when he and other IBM i developers on his team retire in the coming few years as most young developers don't know RPG, nor do many of them want to learn it.

"With Valence I could see that we could get to the point where we would essentially have an RPG-free system. I showed management that with Valence we have this engine that's handling all the display logic and it's 100%

It's really about using the IBM i as a strong DB2 database server and converting all of the business logic to SQL and controlling it all with JavaScript with Valence. Outside of utilizing the DB2 database, Valence apps couldn't be further from legacy IBM i, they're fresh, web-based, and future-focused."

Job	Job Description	Status	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday	Sunday	Week Holiday	Priority	Response
0001	Process Cash Cash											
0002	Customer Payment											
0003	New P/O Received/Not Confirmed											
0004	Invoices											
0005	Process Invoice											
0006	New Receivable P/O											
0007	New Bill & No Receivable P/O											
0008	Small Balance P/O											
0009	New Sales Report											
0010	AP/AR/FA											
0011	AP/AR/FA - AP/AR/FA											
0012	Public - Project P/O											
0013	Public - P/O											
0014	Public - P/O											

User Controlled Job Scheduling

Order	Job	Description	Status	Order Date	Order Amount	Order Type
0001	0001	AP/AR/FA - AP/AR/FA	Completed	08/20/2010	\$110.00	AP/AR/FA

Customer Orders Listing

After implementing Valence, MBI boosted productivity, improved system performance, and reduced reliance on RPG developers.



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It has been several years now since Dan and his team began to use Valence to modernize MBI's ERP applications, and during this time he and his team have developed many hundreds of applications for nearly every area of the business.

"I've built all kinds of analytical applications and interfaces for the management team and for different divisions within the company," says Dan. "They are able to quickly find and download information themselves that they could only get before by asking me to get do it. So, it really put a lot of the power of our data back into the user's hands. And because of Valence I am able to reach across the data in all of our IBM i systems, I am able to pull together information that before had to be manually sifted, copied and pasted into spreadsheets to get consolidated data. There have been tremendous benefits across the board."



"I couldn't be happier with Valence and what it has done to bring the enormous efficiencies to MBI that I envisioned years ago, while reducing the company's dependence on RPG developers," concludes Dan. "And to top it all off, during these many years of using Valence the people at CNX have been, and continue to be, a real pleasure to work with. They respond quickly to my questions, and they have always been open to my suggestions for enhancing the capabilities of Valence; in fact, several of these suggestions have been added to new releases of the product."