



ASNA Case Study

Infocon Corporation ASNA Development Solutions Meet Customer Expectations and Leverage Internal Resources

For 30 years, INFOCON Corporation has accompanied county governments and private industry on the road from manual recordkeeping to computerized data management. As private and public offices move to digital imaging and seek to streamline their operations, INFOCON's mission is to help them optimize efficiency and accuracy. INFOCON provides both custom software solutions and Web-accessible applications for those customers who prefer to utilize INFOCON as their service provider.

To better serve the needs of its customers, in 2001 INFOCON decided to update its client interface and extend its applications to the Internet. After an initial experiment with IBM's WebSphere, INFOCON turned to technology from ASNA, a developer of innovative software to evolve IBM i systems.

Example: The County Access System

County offices across the country facilitate the recording, storage, and retrieval of public and court-related documents. Traditionally, to gain access to the information filed in those offices, individuals had to travel to the particular office and search those records either manually or via computer terminals designated for public use. In recent years, those users have been clamoring for county officials to update their systems to provide the convenience of 24-hour, remote online access. In turn, county government was asking INFOCON to help them accomplish this goal.

INFOCON needed to Web-enable its applications or sacrifice business to the competition. The company had to act quickly to respond to this new market requirement, while at the same time

AT A GLANCE

Customer Profile

For 30 years, INFOCON Corporation has aided county governments and private industry with data management, with the mission of optimum efficiency and accuracy.

Situation

To meet customer demand for Internet interfaces and .NET applications, INFOCON needed to evolve its software to update its client interface and extend its applications to the Internet.

Solution

After an initial experiment with IBM's WebSphere, INFOCON turned to ASNA Visual RPG for .NET and DataGate to offer modern applications and interfaces while preserving its legacy business logic and programming staff.

Benefits

Leveraged investment in iSeries applications

Used existing programming resources

Reduced development time to extend applications to the Web

Offered clients efficient record-level access to databases

Products

AVR.NET, Monarch, DataGate, IBM iSeries

OS/400, DB2/400, Visual Basic .NET



minimizing its own cost and risk. To meet both these imperatives, the company needed to *extend* and *leverage* its current investment in applications, experience, and development resources. Extension of current applications—versus rewriting—would both protect its assets and allow INFOCON to pursue new market demands and opportunities. The company would be able to retain its current customers and pursue new customers.

INFOCON turned to ASNA development solutions to modernize the County Access System, which allows individuals to visit one website and access public information. Aimee Farabaugh, director of software development, describes the process: “Utilizing Monarch for the first time was very rewarding to watch as it transformed our rather antiquated ‘green screen’ code into classes and aspx files. For us, the actual migration was a rather easy process that required only a few text box entries and mouse clicks, thanks in no small part to our ASNA classroom experience and the help provided by their support staff.” After the migration, the majority of the development group’s time was spent improving the system logic to take advantage of the .NET framework and refacing screens to be consistent with Web standards.

Working with ASNA allowed INFOCON to accomplish its goals where other efforts failed. The ASNA development solutions enable quick, deft responses to today’s fast-changing customer demands, at minimal risk. INFOCON was able to rise to emerging market requirements while retaining and extending its existing investments in applications, experience, and personnel. The results have been business growth through customer retention and leveraging of existing investments.

The County Access System is just one example of how ASNA helped INFOCON rise to meet client demand and maintain its competitive position in a demanding, changing market.

The Challenge

Although INFOCON’s application software running on IBM’s iSeries servers was feature rich, stable, and client proven, it was written in RPG IV and presented users with “green screens,” which customers increasingly perceived as outdated. Moreover, customers had begun to request Internet interfaces and applications. INFOCON recognized the need to evolve and extend its software. In response, the company began to upgrade by employing a variety of IBM’s products, including HOD, HATS, CGI, VisualAge RPG, and WebFacing. “We have always been very loyal to IBM because we appreciate the stability, security, and support,” Farabaugh explains. She anticipated the same level of support when modernizing INFOCON’s applications and extending them to the Internet.

Farabaugh says, “Although we achieved some of our goals with these tools, they represented short-term solutions to our needs and not the long-term development environment that we were looking for. As soon as we employed one product, another was presented as the better alternative.” Encouraged by IBM, INFOCON began to utilize WDSi within WebSphere, but without experienced Java programmers on staff, progress was painfully slow. Deadlines were missed, and the projected budget was quickly exceeded. “We spent almost one year on our first WebSphere project and we were nowhere near deploying it,” Farabaugh says. “We decided not to continue with the project.” For INFOCON, considering their lack of

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Aimee Farabaugh, Director of Software Development,



Java experience, the roadmap was simply not economically viable.

At the same time, Farabaugh says, “We also found that our clients were increasingly specifying .NET solutions. This prompted us to completely rethink our development plan and investigate other solutions. We wanted something that would allow us to preserve our business logic, incorporate a truly integrated development environment, limit our programmers’ learning curve, allow us to continue to utilize our iSeries servers, and if possible take advantage of three-tier programming techniques.”

The Solution

INFOCON investigated a number of potential solution providers. “Our CEO investigated solutions which would allow us to retain our legacy business logic and facilitate a migration to .NET while utilizing the IBM i as our server,” Farabaugh explains. In addition to retaining the legacy business logic, INFOCON also wished to maintain its existing programming staff of ten, to continue to capitalize on their cumulative history of 70 years’ experience. “They authored and continue to maintain the software,” Farabaugh says. “They know it very intimately, and to lose that intellectual knowledge would have a devastating effect on the company. We also have a moral obligation to our staff — they are the ones that helped us build and continue our business. So we were committed to retaining and educating the existing staff as much as possible.”

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When INFOCON discovered ASNA’s development solutions, including Monarch and Visual RPG for .NET (AVR), the company quickly saw that these solutions had the greatest potential to address its goals, including preserving the legacy business logic and programming staff. “When we learned we didn’t have to lose everything we had, it made sense,” Farabaugh says. “Once researched, it became a relatively easy decision. These solutions provide us with a methodology to meet our goals.”

Migration of INFOCON’s County Access System was the company’s first project with ASNA development solutions. It was both a very high priority application and a manageable undertaking, consisting primarily of database inquiry programs and the display of document images. The project gave INFOCON’s programmers the opportunity to work with Monarch, familiarize themselves with Microsoft’s Visual Studio and the .NET environment, and progress through the learning curve as a group.

Farabaugh dedicated five RPG programmers to the migration of approximately 100,000 lines of code, and the system was operational within a few months. The actual migration process went very smoothly. Farabaugh says, “In terms of the actual logic, very little massaging was necessary. The primary focus post migration was spent on aesthetics and utilizing the Web controls. We enhanced subfiles in RPG to make the application look more browser-based. The migration tool itself is fantastic; it takes all the difficulty away from you and does it for you. The application’s performance has really increased over what we had attempted with WebFacing.”

The resulting AVR code provided a comfortable transition for INFOCON’s programmers, allowing them to develop sophisticated solutions using the syntax with which they were familiar. “Retaining the programming resources was paramount for us,” Farabaugh says, “and expanding their skills gave them a sense of moving forward,

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being on the cutting edge, and that really infused their enthusiasm.” Development time was reduced, the overall look and feel of the application was improved, and INFOCON has seen a substantial increase in subscribers since launching the .NET site.

Following the success of the County Access System, Farabaugh divided the staff into two groups. One remains actively involved in migrating additional applications using Monarch. The other group is now utilizing AVR to rewrite applications from the ground up. INFOCON is now in the testing stages of its second Monarch project, the migration of an entire real property tax management system, including subsystems for tax bill preparation, building permits, and so forth — an application that INFOCON’s customers are eagerly awaiting. For this effort, Farabaugh’s group is reusing class libraries and cascading style sheets to save development time. They are using Visual Studio, which Farabaugh describes as a very powerful IDE that has increased her programmers’ productivity.

The Results

“We have, within a relatively short period of time, progressed from trying to market outdated applications to offering cutting-edge solutions, thanks to ASNA,” Farabaugh says. “The Web is no longer the great unknown, and PC-based applications are within our reach. The flexibility to stay with the iSeries or move to SQL Server is an option we never thought we could have without new staff.”

Farabaugh is especially pleased with the performance of DataGate, ASNA’s IBM i database access technology. “The main benefit of DataGate is the efficient record-level access to our databases,” she says. “DataGate’s speed is rather amazing. Clients using the product experience the same response time as those directly attached to the iSeries.”

Next in line, INFOCON is in the design phase of a three-tier AVR project to redevelop its register of wills system. Farabaugh says, “Our programmers are excited about programming again, thanks to innovative solutions that are not intimidating and do not require massive relearning.”

About Infocon

INFOCON Corporation, founded in 1976, is an independent service provider that develops custom software for private industry and county government. Governmental applications include criminal and civil court systems, recorder of deeds, register of wills, tax claim, real estate/assessment, fund accounting, payroll, and a number of other specialized systems. INFOCON also provides digital imaging and microfilm archival storage and retrieval systems.

About ASNA

ASNA, provides comprehensive and flexible solutions for modernizing IBM i applications to the Microsoft .NET platform. ASNA enables companies to integrate and extend their solutions to .NET, the Web and beyond, while preserving investments in IT and human resources. ASNA solutions are distributed worldwide and used by more than a million end users.

ASNA is a Gold Level partner of Microsoft’s Partner Network, Microsoft Visual Studio Industry Partner, and an Advanced Tier Member of IBM’s PartnerWorld for Developers. ASNA is also a gold level partner of Microsoft’s Platform Modernization Alliance.

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