

ASNA Case Study

Pathix Uses ASNA Monarch to Revitalize Its Flagship Software

Pathix ASP, a division of ACROHELIPRO Global Services, Inc, specializes in management solutions for industries such as government/military, communications, insurance, utilities, engineering, aviation, and aerospace. Based in St. John's, Newfoundland, Canada, Pathix services include systems consulting, e-Business strategies, and Lotus Notes implementation.

Pathix also sells a world-class aviation management software solution called Navixa, which is used by aviation companies to manage the operation, repair and overhaul of hundreds of aircraft around the world. Pathix has worked hard to nurture its reputation for delivering solutions to its customers on time and on budget. It prides itself in being attentive to customer needs and being nimble enough to react to them quickly.

Although Navixa is a mature and stable product, prospect feedback was starting to reveal a substantial weakness: Navixa required the System i to run which was the cause of many missed opportunities, since many prospects have hardware standards that exclude this platform. To solve this problem in a timely and effective manner, Pathix turned to ASNA for help.

First, admit you have a problem

Vice President Lex Hudson recalls, "We had numerous situations whereby we would respond to an RFP and meet 90+ percent of the requirements but get disqualified because Navixa required a System i." This was a painful issue for Pathix because the Pathix team believes strongly in the System i, but it was clear that this was no time for emotion. In order to successfully market Navixa, Pathix needed to make a strategic platform shift with its Navixa code base.

Once it was decided that a platform shift was necessary for the marketability of Navixa, Lex and his team started strategically thinking through the migration to the new platform. After a few

AT A GLANCE

Customer Profile

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Situation

In order to successfully market Navixa, Pathix needed to make a strategic platform shift with its Navixa code base.

Solution

Pathix chose to use ASNA Monarch and ASNA Visual RPG for .NET (AVR for .NET) to migrate Navixa to .NET.

Benefits

Legacy code base moved to .NET where the application can be further extended and enhanced

Existing RPG programming team able to maintain and enhance the migrated application

Software now provides a modern user interface

Products

ASNA Visual RPG for .NET, ASNA Monarch, ASNA DataGate, DB2/400, SQL Server



discussions, these top-level conclusions were reached:

Microsoft's .NET was selected as the target platform. This decision was driven primarily by the breadth and quality of development tools available for .NET, the commodity-like economy of its servers, and the abundance of programming and network administration talent.

Navixa is composed of more than 3000+ tested and proven RPG programs. Given the program's size, it was simply too large for the Pathix team to rewrite from scratch in any rational time frame. Pathix needed a migration aid that would let them reuse as much of the existing RPG as possible.

The Pathix programming team has very strong RPG skills. The migration path for Navixa needed to provide a way to leverage that team's existing skills. Lex also reasoned that if the RPG team could perform the migration, that same team would be acquiring the skills necessary to extend and modernize the migrated application later.

For the want of a migration solution

After considering a Java-based solution, and a few other screen-scrapers-based products, Pathix chose to use ASNA Monarch and ASNA Visual RPG for .NET (AVR for .NET) to migrate Navixa to .NET. That Monarch migrates green-screen RPG to ASNA Visual RPG was given high value by the Pathix team. Screen scrapers held little appeal because if they could manage to make Navixa look better, the application would still be tied to the System i and only be able to have minimal functional enhancements done to it.

Lex says, "We felt that ASNA had the best offering for our long term business needs. The initial costs were competitive and in the end we'd have a version of Navixa running under .NET and have the option of later using Microsoft's SQL Server as its database." The Monarch/Visual RPG approach let the Pathix team's RPG skills shine and the resulting work was something the Pathix team would be quite capable of further extending and modernizing. There would be no need for specialized consultants and contract programmers.

Introducing ASNA Monarch and Visual RPG

By AVR for .NET is a .NET-based RPG compiler that connects applications to either the System i database or to Microsoft SQL Server. ASNA Monarch is ASNA's migrations suite that transforms green-screen RPG applications into AVR for .NET applications. When ASNA Monarch modernizes an existing interactive green-screen RPG program, it creates an AVR for .NET ASP.NET project. That project contains all of the source code for the application (including DDS, CL, and RPG). The user interface is rendered in HTML (as defined by the original DDS) in a browser.

The RPG and CL logic is executed on a Windows 2003 server, which is connected through the ASNA database engine, ASNA DataGate. Pathix used a staged migration plan because of its need to ultimately migrate Navixa off of the System i. Navixa's initial migration would continue to use the System i as its database server. Later, with few changes to the application, it will be directed to SQL Server which will provide Pathix with a 100% .Net solution.

The Pathix migration schedule called for a phased approach to manage the tasks of migration versus the tasks of



modernization. The goal of migration is to simply get the project migrated to .NET and running as it should. The modernization step includes user interface enhancements and adding program functionality. Before an application is put through the modernization step, it needs to have been through the migration process and tested. This separation keeps the modernization steps out of the way of the initial program migration.

Hitting the ground running

The first step for Lex and his team was to get ASNA training. He and several of his team members attended classes in ASNA's San Antonio classroom for both ASNA Visual RPG and ASNA Monarch. Lex recalls, "Once we were trained, we felt like we had the knowledge to development a timeline and rational expectations for our migration project. In short order, we began migrating small components of Navixa. These early forays into Monarch, with some of the simple parts of our application, gave us the confidence and skills to move forward." Early phases of the project took about six months to get about 30% percent of Navixa migrated and Lex expects to take another year or so to completely migrate the application.

One of the ways that Lex keeps this migration project on track is to have realistic expectations. In some instances, the code being migrated is very old and some headaches were expected. Lex says, "The migration process generally went as we hoped it would. When you do a project of this size, reusing as much of a legacy code base as we did, you can expect problems. And we had some--especially in the early migration efforts. For example, we experienced occasional headaches with some of the migrated code. But with a lot of hard work, and plenty of help from ASNA, we're getting the job done. I'm very proud of our team and how hard they've worked to get this job done."

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Lex Hudson, Vice President

Ever realistic, while acknowledging the occasional frustration, he also says, "Despite the occasional migration headache, using ASNA's Monarch we are getting the project successfully migrated and we're very excited about that. In the end, we'll have a .NET-centric code base from which to grow further our application."

The Payoff

Today, the migrated parts of Navixa are up and running using the System i DB2 database. Several installations are using the application today and are very happy with it. Lex says, "Things have gone well and the users are eagerly awaiting deployment of the remaining phases." Lex points to application response time and the look-and-feel of the product (after coming from a legacy green-screen application) as particular success factors.

He says users report that they would much rather have the application running in a Web browser with point-and-click capabilities. And not only are hundreds of users happy, but so are the Pathix managers. Partnering with ASNA has led to improved business agility, increased productivity, and lowered costs. Lex elaborates, "We can now develop new modules and functionality that we can deploy as reusable classes and Web services. Application enhancements, such as Web service integration with business partners, are now a reality for our app. When it was green-screen based, those kinds of enhancements were but a dream," says Lex. One other benefit has been the ease of which some new



hires, which have no System i or RPG skills, but have VB skills, have been able to become productive in the new environment.

Perhaps as important as having the existing users happy with the ASNA Monarch migration results, Lex is also excited that Pathix no longer gets dismissed by prospects based on the hardware platform. The next generation Navixa, named NavixaMRO, thanks to Monarch, is competitive and appealing to prospects.

As for the future, Pathix is setting its sights on adding Microsoft SQL Server Support. Lex explains, "ASNA's products have substantially enabled our Navixa step-wise migration approach. Because ASNA Visual RPG can use either the System i DB2 database or Microsoft Server SQL as the application database, next up for us is to make the switch over from the System i to Microsoft servers. Our ability to do this has many of our prospects very excited. They will be able to buy off-the-shelf commodity Windows servers on which to host Navixa."

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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