

Agilysys boosts popularity with move to Microsoft .NET

This article is based on a case study published by Microsoft Corporation.

Agilysys, Inc., a solution provider to the hospitality industry, sought to grow its market share, but the company's core software only ran on System i and Visual Basic, a drawback for customers on the Microsoft® .NET environment. Agilysys needed a cross-platform solution and chose LANSA. The new system provides complete functionality and offers customers improved agility and more features.

Tina Stehle, Senior Vice President & General Manager, Agilysys Hospitality Solutions Group, says, "Time to market was crucial, because the market had moved to Windows. Every additional day that it took us to deliver the solution was another day we lost potential sales. I estimate LANSA helped us bring the Guest 360 solution to market 50 percent faster than we otherwise would have, saving more than a year; and, more importantly, improving quality and enabling the company to capture additional sales."

Business Needs

Agilysys provides one of the world's most popular integrated hotel and casino property management solutions. The company's Lodging Management System® (LMS) is a property management system that automates every aspect of hotel operations, from reservations to credit card processing. LMS is especially suitable for large-scale hospitality and gaming operations and powers many of the largest hotels in the world, including most of the mega-hotel-casinos in Las Vegas.

The original application was developed by IBM in the RPG language for deployment on the AS/400 – now the IBM i running on IBM Power Systems. In the 1990s, this was a sound

business decision, when the IBM midrange computer was a popular business alternative to the more expensive mainframe, and when more cost-effective choices, such as Windows Server®-based computers, were not as scalable as they are today.

Agilysys' hospitality solutions have been extended with LANSA-based Web extensions since 1997, when the LMS ResNet solution became the first real-time, fully integrated Internet hotel booking system in the world. LMS ResNet gave secure access to LMS DB2/400 data in real time, accessing the most up-to-date inventory availability, rating strategy, credit authorization and customer information needed to make a valid reservation. In 2000,

Agilysys..



GUEST360

LANSA was also used for a wireless solution that enabled hotel agents to check in and check out guests, process credit cards, print receipts and program room keys anywhere in or nearby the property. The solution helped reduce queues at the reception desk and provided guests the convenience of remote check-in and check-out.

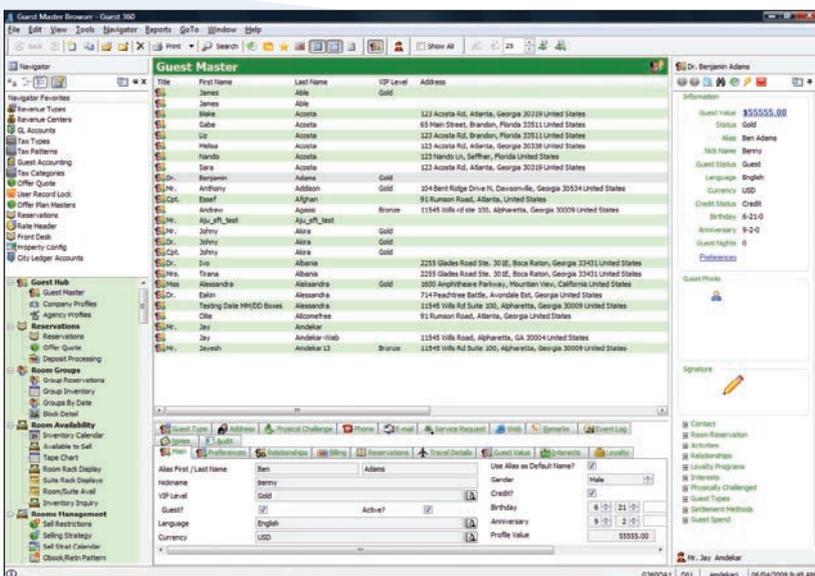
"LANSA helped us bring the Guest 360 solution to market 50 percent faster."

Although the LANSA-developed extensions could, theoretically, be deployed cross-platform, the RPG-based core LMS modules were limited to System i deployment.

In 2004, Agilysys acquired the LMS solution and the company that provided it. Agilysys saw the limitation of offering the solution only on the System i platform.

"We saw resistance to the System i," acknowledged Stehle, "Smaller properties weren't familiar with it and found it hard to embrace. The graphical interface that people expected was tough to deliver effectively on the System i. We were even having trouble finding top-notch professionals with System i backgrounds."

Agilysys began moving LMS to the J2EE environment to capitalize on in-house experience. "But we didn't see a cohesive story with Java, including broad integration with enterprise software and maximum productivity," says **Criss Chrestman**, Vice President, Software Development and Services, Agilysys Hospitality Solutions Group. "That's when we began to look at the Microsoft® .NET Framework. We realized that application development would be faster and easier, we could integrate with Microsoft desktop and server software and productivity tools, and we could create a services-oriented architecture (SOA) that would give customers maximum flexibility in how they used the solution." →



The Guest Hub in Guest 360 is a centralized repository for guest profiles, including history, itineraries, interests and preferences.

The Solution

To develop its new generation of property management system called Guest 360™, Agilysys turned to LANSAs, a Microsoft Gold Certified Partner. The LANSAs development platform for .NET was the ideal choice for Agilysys.

"System i developers who know RPG code are being asked to move from a procedural language to the open object-oriented environment of .NET," says **Greg Best**, Vice President of Business Development, LANSAs. "It's a different world of event-driven programming and graphical user interface design. LANSAs makes it possible for RPG developers to take advantage of as much of their existing skill set as possible as they make that transition."

The rewrite of its hospitality software was the largest project Agilysys Hospitality Solutions Group had ever undertaken, and company executives were conscious of the need to reduce risk and ensure success.

"We wanted to come to market quickly, but we also needed to do it correctly," says Chrestman. "Our product is sophisticated, with more than 20 application areas and hundreds of modules. Our research showed that larger projects – those involving more than 100 years of developer time – had phenomenally high failure rates."

"We wanted to control that risk, so we chose productivity frameworks that held the project under 100 years without limiting functionality or sacrificing architectural sophistication. By using frameworks, you reduce project time. In the process, you also improve communication, quality and supportability. The new solution is built to scale to support the largest hotels in the world."

To further increase its chances for success, Agilysys adopted a series of best practices, including maximum reuse of code and functionality, speed of development and a flexible architecture. LANSAs provided functionality to facilitate reuse of code, as well as integration with Microsoft Web services and the Windows® Presentation Framework that also made up crucial parts of the new solution.



Tina Stehle, Senior Vice President & General Manager, Agilysys Hospitality Solutions Group.

"Existing customers benefit from tight System i and .NET integration."

Guest 360 software is based on key functionality found in current Agilysys property management solutions, user recommendations and industry trends, such as guest-oriented reservation management. By capturing guest events, information and preferences, the system enables hotels to truly know their guests and realize a competitive advantage. The system's intuitive features move beyond traditional property management to assist in predicting guest preferences and making suggestions based on guest recognition.

The Guest 360 solution is now in production use, with a successful first implementation at a major new hotel in the southeastern United States.

The Benefits

Using the .NET and LANSAs frameworks brought benefits to Agilysys even before the software made it into the hands of customers.

"Time to market was crucial, because the market had moved to Windows. Every additional day that it took us to deliver the solution was another day we lost potential sales," said Stehle. "I estimate LANSAs helped us bring the Guest 360 solution to market 50 percent faster than we otherwise would have, saving more than a year; and, more importantly, improving quality and enabling the company to capture additional sales."

"In every request for proposal we see, it's clear that customers are expecting to acquire a .NET solution," she says. "We don't want to miss an opportunity. Offering a .NET-based product and being able to bring it to market quickly means we've missed as few opportunities as possible."

Agilysys began to see increased interest in its product as soon as the new version was announced. "Every hospitality customer is looking for agility and the ability to meet new business demands quickly," says Chrestman. "The .NET Framework gives them those capabilities."

For example, Chrestman sees the move to .NET making it possible for the Guest 360 software to integrate with the full range of Microsoft Office solutions and extend to include mobile environments. Microsoft also gives customers flexibility where they often need it most – in the datacenter.

Conclusion

"With the Guest 360 solution, we've assumed we have to fit into datacenter models that might arise over the next 20 years," says Chrestman. "The use of .NET and the SOA structure help guarantee that the software gives customers that flexibility."

"The Guest 360 solution and the LANSAs and .NET architecture behind it perform well in the high-volume transaction environments our customers generate. New customers may opt for a total Windows environment, while existing customers benefit from tight System i and .NET integration," concludes Chrestman. ■

COMPANY AND SYSTEM INFORMATION

- The Agilysys case study above is based on a case study published by Microsoft Corporation at www.microsoft.com/casestudies/casestudy.aspx?casestudyid=4000003867
- Agilysys is a leading provider of innovative IT solutions to corporate and public-sector customers, with special expertise in select markets, including retail and hospitality. Headquartered in Cleveland, Agilysys operates extensively throughout North America, with additional sales and support offices in the United Kingdom and China. Agilysys employs more than 1,300 staff.
- Guest 360 software is developed with Visual LANSAs and Microsoft .NET Framework 3.5. Current server implementations include Microsoft Windows Server 2003 Enterprise Edition and System i. For more information visit: www.agilysys.com/hospitality