Microsoft .NET
Customer Solution Case Study

School Improves Student Enrolment with Integrated Web-based System

Overview

Country or Region: Batangas, Philippines
Industry: Education

Customer Profile

De La Salle Lipa is an autonomous school, with about 700 staff, providing education, college, and graduate-level courses to about 10,000 students. Founded in 1962, it is located in Batangas, Philippines.

Business Situation

De La Salle Lipa had an enrolment process running over disconnected systems that could not effectively cope with student numbers every semester, leading to long queues during registration.

Solution

De La Salle Lipa deployed Microsoft® ASP.NET 2.0 and Internet Information Services 6.0 to drive data flow between different systems, and Microsoft® SQL Server™ 2005 as a consolidated database.

Benefits

- Accelerated enrolment process
- Improved staff efficiency with convenient information access
- Simplified allocation of resources for courses
- Reduced manual data entry tasks
- Acquire a rapid return on investments

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Mr. Rex Raymond V. Torrecampo, Vice Chancellor for Administration, De La Salle Lipa

De La Salle Lipa, an autonomous school, provides basic education, college, and graduate-level courses in Batangas, Philippines. With approximately 10,000 students, its legacy enrolment system could not handle large registration volumes every semester. Microsoft® Gold Certified Partner dB Wizards helped the school launch E*Wizard, a School Management System based on Microsoft® SQL Server™ 2005, Windows Server® 2003, Internet Information Services 6.0, and Microsoft® ASP.NET 2.0 which was developed with Microsoft® Visual Studio® 2005. The integrated web-based system has accelerated the enrolment process by immediately determining payable amounts for courses selected. The school can easily assign teachers and allocate resources for courses with readily available information. Additionally, the school has reduced the number of contract employees needed to perform data entry tasks during enrolment.

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Mr. Rex Raymond V. Torrecampo, Vice Chancellor for Administration, De La Salle Lipa

Situation

De La Salle Lipa (DLSL) is an autonomous school providing academic courses to pre-school, grade school, high school, college, and graduate-level students. Founded in 1962, the school has more than 700 employees including part-time workers, and approximately 10,000 students.

Located on a 10-hectare campus in Batangas, Philippines, the school is part of the De La Salle Brothers' group of Christian schools, whose mission is to provide education in the Philippines. In addition to offering basic education and degree courses, the school provides certificate programs in the culinary arts, medical transcription, entrepreneurship, IT, and hotel and restaurant management.

DLSL constantly seeks new ways to use technology to automate manual processes to improve its operations. With a 17-member IT department, DLSL has developed small-scale, in-house IT applications, including a computerized registry to keep track of alumni, a facilities reservation system, and a vehicular reservation system. For larger projects, the school collaborates with technology partners to develop and deploy computer systems.

DLSL plans to implement an electronic entry system subsequently. Based on smart cards and access systems located throughout the school, the system will help monitor student movement and ensure that students are within the school premises during study hours. Other planned projects include facilitating credit card payments for its courses and campus services, and adopting Windows® SharePoint® Services for its employees to participate in inter-office collaboration.

However, the school's first priority was to streamline its enrolment process. Every semester in the past, around 5,000 college and graduate students would spend up to two days queuing up to enrol and make payments for new courses. Mr Rex Raymond V. Torrecampo, Vice Chancellor for Administration, De La Salle Lipa, says, "We had long queues of students at the cashiers' offices because processing of each student involved manually keying in each individual student's course selection into the accounting office database so that the cashier knew how much to charge."

Students first checked course offerings and submitted pre-enrolment forms to the registrar's office. While students settled any arrears in payments, administration staff gave them notices of their final grades from the previous semester and whether they had passed or failed all their courses. Students then submitted a revised enrolment form and paid their new course fees. Torrecampo says, "The complicated enrolment process took longer than necessary and we regularly received complaints from parents and students because of this."

DLSL's enrolment process was the result of disconnected accounting, cashiering, and student records systems. This led to staff manually calculating individual fees. Additionally, the school's database could not accommodate the expanding student numbers. "We had outgrown our old IT systems. It used to be adequate for a small college but not a large teaching institution with 10,000 students," says Torrecampo.

"It can be said that we have recouped our investment in the integrated school management system almost right away because the migration from our previous disconnected system was long overdue."

Mr. Rex Raymond V. Torrecampo, Vice Chancellor for Adminstration, De La Salle Lipa

Additionally, staff referred to multiple paper-based files to assign teachers to courses and prepare class schedules. Faced with these manual, disconnected processes, DLSL wanted to simplify student enrolment with a self-service system that automatically generated payment amounts by centralizing all student, course, and accounting details.

Solution

DLSL deployed an integrated School Management System called E*Wizard, which used Internet Information Services 6.0 and Microsoft® ASP.NET 2.0 as the Web-based application building blocks; Windows Server® 2003 as the operating system; and Microsoft® SQL Server™ 2005 as the database. The entire system was created with Microsoft® Visual Studio® 2005.

According to Torrecampo, "The system delivered what we needed. Initially, we looked at first an Australian and then a Singapore-developed system, but these would require more customization because they did not meet our specific demands."

DLSL chose Microsoft® Gold Certified Partner dB Wizards to help deploy the system. "dB Wizards goes out of its way for us. Its staff are well trained to deliver vital solutions and they went out of their way to ensure the delivery of the project," says Torrecampo.

The project started with a business process review in September 2006 to determine which applications to deploy. E*Wizard was presented to DLSL, and both organizations agreed on the delivery timeline.

Implementation started in January 2007 in two phases with involvement from a project manager, an assistant from the registrar's office, and two personnel from the business office.

SQL Server 2005 was used to create a database of student, enrolment, course, and faculty information. Next, Internet Information Services 6.0 was deployed as a Web server for the system. To accommodate the new Web server and database system, two IBM X3500 hardware were rolled out. Visual Studio 2005 ASP .NET 2.0 was used to develop the Web-based application.

The project connected student information from the registrar's office to accounting information in the business office.

Parallel runs were conducted in May 2007, October 2007, and January 2008 to ensure the system could cope with the data volumes once it went live. The system was then launched in May 2008 over the school LAN.

The system was accessed by roughly 5,000 tertiary students through 200 workstations located at four computer labs during the June 2008 enrolment. After selecting their courses for the new semester, students proceeded to the business office to make payments. The interface was easy to use, and student assistants were present to help participants with their enrolments.

The implementation also integrated the admissions and health office records into the system. Additionally, DLSL wants to make the system available over the Internet so that students can register for courses online. Torrecampo says, "Once the system becomes accessible online, our students can easily enrol for courses from anywhere with an Internet-connected computer, and at anytime, and make payments at the nearest bank." dB Wizards is providing on-going support to address issues as they arise with the use of the system.

DLSL also plans to integrate the entire Web-based environment with its existing Microsoft Dynamics™ GP accounting system in its next phase of development.

Development proceeded smoothly because the foundation Microsoft® .NET language was familiar to the developers working on the project. At the same time, with its Web-based foundation, E*Wizard fits easily into existing Internet Protocol-based systems.

Benefits

With the integrated School Management System, DLSL can automate its student enrolment process by efficiently acquiring all student, course, and accounting information. Additionally, it is now easier to assign staff and resources to courses every semester.

Accelerated Enrolment Process

The system has shortened the enrolment process to a few minutes with students now opening Web browsers, choosing their courses, and immediately proceeding to the cashiers' office. Torrecampo says, "With the new system in place, our staff do not have to manually calculate student fees. Instead, the amount is determined immediately after students choose their courses at the workstations."

He adds, "Unnecessary waiting and the long lines have dramatically decreased with Internet Information Services (IIS) 6 delivering a seamless flow of information between the registrar's and the business offices."

Improved Staff Efficiency with Convenient Information Access

The integrated School Management System lets staff access information from several offices without physically searching for hardcopy files. Torrecampo says, "By being Web-based, the system built on ASP.NET can be accessed at anytime over any terminal in the school." He adds, "The integration of previously separate information systems has significantly improved productivity of our administration staff by delivering immediate information on student details and courses taken."

Simplified Allocation of Resources for Courses

Previously, DLSL staff had to determine what rooms and teachers to assign for a semester course based on information that they acquired from hardcopy files or several different databases.

Now, information on staff schedules, room availability, and enrolled numbers is available at a glance. It is easier to assign teachers and allocate rooms for each course.

Reduced Manual Data Entry Tasks

The new system draws the information that students key into the terminals to automatically process payment amounts. In the past, payments were calculated after accounting for any past arrears owed and students' eligibility for the courses selected. "With the Microsoft-based browser system that connects to a consolidated SQL Server 2005, we have instant access to all relevant information, thus we need less part-timers to perform data entry tasks during enrolment," says Mr. Rex.

For More Information

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For more information about dB Wizards products and services, call +632 757 4889 or visit the Web site at: www.wizardsgroup.com

For more information about De La Salle Lipa products and services, call +6343 756 5555 or visit the Web site at: www.dlsl.edu.ph

Acquire a Rapid Return on Investments

"It can be said that we have recouped our investment in the integrated school management system almost right away because the migration from our previous disconnected system was long overdue," says Torrecampo.

"It is a sound investment because of the convenience experienced by students during enrolment and our staff who now have easy information access," adds Torrecampo.

Microsoft .NET

Microsoft .NET is software that connects people, information, systems, and devices through the use of Web services. Web services are a combination of protocols that enable computers to work together by exchanging messages. Web services are based on the standard protocols of XML, SOAP, and WSDL, which allow them to interoperate across platforms and programming languages.

.NET is integrated across Microsoft products and services, providing the ability to quickly build, deploy, manage, and use connected, secure solutions with Web services. These solutions provide agile business integration and the promise of information anytime, anywhere, on any device.

For more information about Microsoft .NET and Web services, please visit these Web sites:
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