

University of Arkansas

University Background

Established in 1871, the University of Arkansas is the only comprehensive doctoral degree granting institution in Arkansas. It is classified as a Carnegie II Research Institution. The University campus offers more than 230 undergraduate and graduate degrees in more than 150 fields of study in agricultural, food and life sciences, arts and sciences, business, education, engineering, architecture and law.

The University of Arkansas is one of only five institutions to receive CASE's Circle of Excellence award for development efforts. The University has won the award for three consecutive years.

Project Background and Goals

The University of Arkansas first deployed MitemView in summer of 2000 to integrate new Web applications with an IBM mainframe. The University's first project was to offer students the option to pay tuition and fees over the Web and have real-time credit applied to their accounts. The project's primary goal was to offer better customer service to students.

Why MITEM Was Selected

Previously, in 1999 the University had reviewed vendors such as Attachmate and Jacada, but was dissatisfied with them. "Those solutions cost a fair amount of money and were lacking any elegance that compelled me to want to use them. Some program suites were simply wrappers for HLLAPI code. They did not change the underlying program architecture, so I could not justify spending the money," stated Pete Campbell, IT Manager for Financial Affairs at the University.

Campbell decided he would write a Visual Basic HLLAPI screen-scraping application using a TN3270 emulator program. He found his own HLLAPI creation to be typical of such programs: temperamental and requiring a lot of administrative "baby-sitting". Because of the significant administrative work associated with this in-house solution, Campbell decided to search again for a better solution.

Campbell found MITEM on the Web during his research, was intrigued, and made contact to set up a proof of concept (POC) demonstration for the early summer of 2000.

Because Campbell was unimpressed by previous legacy integration products, he considered MITEM a one-horse show - if the POC went well he would be likely to purchase the software. The outcome of the POC was extremely positive.

"MITEM's ease of development and flexibility when dealing with screen changes was impressive. It handles session management very well. State changes do not require a detailed examination of the multiple layers and hundreds of lines of code like HLLAPI programs and other screen-scrapers we reviewed," stated Campbell.

Financial Services Applications

Campbell has found it easy to deploy new applications throughout the departments he serves. These applications have reduced the need for staff to interface with difficult to navigate mainframe green screens. Campbell states that "Since MITEM's event driven framework does not create a huge, cumbersome nest of code I am free to develop new applications knowing they can be easily deployed, maintained and administered".

Campbell and his team next developed a composite application for accounting that combines multiple green screens into one Windows-based application that allows staff to post changes to student and departmental accounts. A common such transaction is assessing student late fees. Previously, all late fees and many other student account related transactions were manually processed by 8 people. "This process required our staff to pour over a one-inch thick printout and manually enter late fees for an average of 3,000 students each semester. The MitemView application automates this process and now takes about 15 minutes versus 24 hours of staff time," said Campbell. (More)

"It is easy to deploy additional applications that create business value with MitemView. This flexibility continues to add value to our purchase."

- Pete Campbell
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MitemView applications at a glance:

- Composite application for paying student tuition and fees via the Web
- Web-based accounting application for assessing student and departmental transactions
- Application for disbursement of loan advancements that updates students accounts in real-time
- Web-based student registration
- Application that locates and processes pending transactions that require review (deploys fall 2002)

Department of Computing Services

Computing Services (CS) wanted to give students the option of registering for classes via the Web. Currently, most students use an Interactive Voice System (IVR) via the telephone to register. "This system is cumbersome and time consuming to use. Students have to enter each class they want to take via the phone keypad and wait for a response. If the class is full or cancelled, they have to re-enter another class. We wanted a much more elegant solution," said Cathy Middleton, Project Manager for CS.

CS had looked at several products for this project, but had not found the right solution. After talking to Campbell about his department's successes with MitemView, CS arranged their own POC. The result of this demonstration was that CS decided to purchase and deploy a Java-based MitemView server.

The new MitemView Web-based application will allow students to register for classes via a full-screen, interactive Web interface. "This implementation is very important to the University because our research has shown that offering such a service is a criteria that potential students consider when selecting a school, and also a criteria used by independent organizations that rate Universities", stated Middleton.

What's Next?

Financial Affairs will deploy a Web-based application in the fall of 2002 that will be used campus-wide by 500-600 administrators to locate and process pending transactions that require review. Such transactions include: travel requisitions, pay distribution, time sheets, and expenditure transfers.

MITEM consultants helped develop the framework for this application that replaces several dozen 3270 terminal screens with a single Web browser interface.

Time Line for Deployment of MitemView Applications by University of Arkansas

August 2000

Financial Affairs/Office of the Treasurer deploys MitemView server that integrates with an IBM 3270 mainframe. New application allows students to pay tuition and other fees via the Web.

December 2000 - Financial Affairs deploys new Web-based composite application for Accounting that allows staff to assess late fees and many other student account-related transactions. This application eliminates the need for staff to interface with a mainframe green screen.

September 2001 - Financial Affairs deploys new application that allows Cashiers Office to distribute emergency reimbursement checks (e.g loan advancements) for student and update their accounts in real-time.

December 2001 - Existing application that allows approximately fifty campus-wide departments to process Web-based external invoices is tied to the composite application rolled out in Dec. 2000. This allows Financial Affairs accounting staff to process the associated accounting transactions via a Web interface. This eliminated redundant data entry in green screen interfaces.

April 2002 - Computing Services (CS) installs MitemView running on a Java server upon which a Web-based student registration program is deployed. After initial test with sample groups in April, CS plans to launch the application for full student body use in the Fall of 2002.

Fall 2002 - Financial Affairs will deploy a Web-based application that will be used campus wide by 500-600 administrators to locate and process pending transactions that require review.