

eLicense System

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Baylor University has developed a system for tracking licenses of the electronic resources provided by the University libraries. The system, called eLicense, maintains data about the license terms, renewal agreement, vendor information including the support contact, and other pertinent fields. Each vendor has unique requirements regarding how the resources can be used and by which university constituents. This system centralizes all of this critical information in one place, relieving the need to constantly reference filed paper documents and/or track down knowledgeable library staff to answer questions related to electronic resources access. The Web interface makes the system easy to learn and use. eLicense also includes a type of workflow capability. E-mail notification of appropriate library staff occurs at different stages during the initial entry and approval of a new electronic resource license.

Baylor technology staff wrote the eLicense application software using the Microsoft.Net development environment. The database is in an SQL Server database on a Dell Windows 2000 server. eLicense users log into the system with their Baylor network ID. Authorization for the various levels of system access is maintained within the application database.

Introduction of the Organization

Baylor University, located in Waco, Texas, is a private university affiliated with the Baptist General Convention of Texas. It is the largest Baptist university in the world and the oldest university in continuous existence in Texas, having been founded in 1845. Baylor has approximately 14,000 students and 1,800 faculty/staff and, on the academic side, is composed of eight colleges and schools in addition to the School of Graduate Studies, the School of Law, and the George W. Truett Theological Seminary. Also, Baylor is the only private school member of the Big Twelve Athletic Conference. The institution's annual operating budget is currently \$282 million and total assets are \$1.2 billion.

The mission of Baylor University is “to educate men and women for worldwide leadership and service by integrating academic excellence and Christian commitment within a caring community.” In continuing dedication to this mission, [Baylor 2012](#), a 10-year Vision statement was announced in January of 2002. Achievement of this challenging commitment will provide an opportunity to demonstrate that an institution can achieve and maintain greatness and at the same time take seriously its Christian mission.

Statement of the Initiative

More and more library resources are available in electronic form. The library constituents of today expect to have electronic access to the resources they need. However, each of these resources has its own set of rules regarding access and usage and

management of this information is becoming more arduous. As the volume of these electronic resources licenses and contracts increased, the Baylor 21st Century Library staff recognized the need for an effective means to centralize and track information about the various licenses and their requirements. This led, in mid 2001, to an application development request to the Information Systems & Services section within Baylor's Information Technology Services organization to provide a Web-based application solution.

Design

Staff members from the 21st Century Library were the clients for this project. One senior systems analyst from Information Technology Services designed and programmed the application. Database administration help was allocated as needed. Due to other project commitments, development on this system did not begin until fall 2001.

No new hardware or software was purchased for this project. The system requirements specified that it be Web-based, maintain a centralized database of information, and provide appropriate access controls. Baylor technology management had decided to move to the Microsoft .Net development environment for Web application development. This eLicense project was one of the first two Baylor .Net projects. Therefore, some training was required and, because this was a learning project, the time required for completion was somewhat longer than would normally be expected. However, because this was not a project with a hard and fast deadline, it was perfect for an early application using a new technology. The database management system selected

for this application was SQL Server. The eLicense database was added to the primary production SQL Server computer maintained centrally by Baylor's Information Technology Services organization.

Implementation

The application database was designed based on close consultation with the 21st Century Library staff regarding data requirements, processing flows, and security needs. The final database included fields to track license terms, renewal agreements, and vendor information including support contacts. The Web interface and the database were designed, developed, tested, and completed by the spring of 2002. However, data entry and full use of the system did not begin until the fall of that year due to time constraints within the client department.

Users of the application are set up with one of four roles – acquire, review, approve, or use. *Acquirers* initiate a database record with the information the library acquisitions area has about new licenses. *Reviewers* complete information required for a license record and indicate that the new license is ready for approval. *Approvers* provide final review of the total record and mark the license entry as complete. *Users* search and view license records but make no changes. There are also a restricted number of *administrators* who set up users and maintain system validation tables within the database. The login to the system is the person's Baylor network ID and password.

The workflow built into the system functions as follows. When acquirers add a license to the table, an email message is generated to the persons who are reviewers that

indicates the license will be forwarded to them. The license status in the database is set to review. When a reviewer logs in, s/he is shown the licenses awaiting review in a drop down list. Selecting a license displays it and allows the reviewer to complete the data. Then, the record can be saved for more action later or can be flagged as having been reviewed (a date and reviewer field are set, too), at which time the status changes to approve. Email is sent to the person in the approver role. Approvers also get a drop down list at login of licenses awaiting approval. The license can be approved or rejected. No data can be changed at this point. After approval, emails are generated back through the chain to notify the appropriate parties that the license is now available. The status in the database is updated to available.

All persons set up with logins can search the database by title or vendor. Multiple matches to a search cause the display of a list of links to the matching licenses. Future plans call for scanning the physical license agreement and linking the image to the database license record. Work is in progress to get historical license agreements entered into the system. Also, new licenses will be entered concurrently with these older ones.

Benefits

There are numerous reasons this application was developed. The library staff had a great need to be able to look up the details of their various licensing agreements efficiently, without having to track down the paperwork in a file cabinet in someone's office. There was also a need, particularly in Interlibrary Services, to have a way to see which electronic resources could be used for obtaining articles to send to other libraries,

instead of getting the article from the print collection. Library reference staff members occasionally have to see if a resource is legally available to a non-Baylor client who walks in and wants to use the library. Additionally, there was the belief that there should be a more defined process for approving licenses and a way to know where in that process any agreement stood at any time. The entry requirements design of this system insures that all pertinent information about an agreement, including fields related to technical support, customer support, and usage statistics, are determined up front. This saves scrambling to come up with that information at a later date when it is needed in a hurry.

Retrospect

This will be a very valuable system to the Baylor University 21st Century Library. Because of additional experience gained with the .Net environment since this project, some of the technical design and programming might be done differently if the system development began today. Otherwise, the application serves the purpose for which it was created very well.