

Case Study

TECHSYS is chosen by a student insurance company to create an enrollment and tracking web application

Enrollment Web App

TECHSYS provided a more efficient and more usable application by implementing a process of analysis, usability testing and incremental deployment of application functionality.

Services featured

- Business Analysis
- Application Architecture
- User Interface Design
- Application Design
- Training and Mentoring

Technology

- ASP.Net
- C#.Net
- Web Services
- ADO.Net
- SQL Server
- Report Server

This leading provider of student insurance products and services needed help in creating a student data entry application which handles the complete enrollment for students and automates the loading of student lists from colleges to create insurance coverages. TECHSYS provided analytical, technical, and managerial expertise to define and implement a development process that allowed the company to realize a quick solution through a minimal amount of time, effort, and cost.

The business issue

This insurance provider, one of the nation's largest marketers of student insurance, is a leading provider of insurance products and services geared towards students, from kindergarten to grad school. They input large amounts of policy and enrollment information through antiquated systems that provide no capabilities for monitoring and tracking, and did not interface with existing systems. Thousands of policies are inputted manually during peak seasons through time consuming data entry screens that have not kept up to date with existing technologies, making the implementation of changes time consuming and hard to come by. In addition, the company received paper lists of enrollment information from schools that had to be manually entered. Automation of this process was critical to meeting timelines.

There were three primary goals for implementing a new load system: 1) Increase data entry productivity by designing a system that was simple to use but required minimal training and effort, 2) have the capability to track and analyze the results of the data entry process, and 3) allow for batch loading of lists from schools to reduce the workload of the data entry clerks and managers. Accomplishing these goals was imperative for our client to meet deadlines due to increased volume of applicants while keeping costs low throughout the entire entry and review process, and while managing with the only non-moving target on this project being the delivery date.

Our approach

The first step in the design of the application was to perform analysis on existing

Enrollment Web App

TECHSYS followed an iterative phased approach that allowed for continual feedback regarding the design and implementation in meeting deadlines while allowing for customer involvement and feedback

“We had significant work to complete in a very short time frame and you guys helped significantly with stabilization efforts.” – Leader IT Development Team

applications and interview the application stakeholders. We conducted meetings with managers, team leads, data entry clerks, and existing IT resources. We assisted in finalizing the business rules while at the same time provided guidance on standards and design methodologies. Information gathered from all of the sources was used to guide the design effort. Analysis was performed on current applications for interface points and the capability to reuse objects that were to be created. Prototypes were developed for visual presentation to the users to guide the design.

With constant input from the client team, the project was implemented using an iterative approach. At each stage of the process, feedback was solicited from as wide an audience as possible in an effort to verify that design goals were being addressed properly. An architecture framework was developed to address object oriented methodologies and standards implementation. Objects and stored procedures were created using existing logic where possible to speed the development process. The application was built completely using TECHSYS resources both onsite and offsite.

TECHSYS provided guidance on all options available particularly in areas of significant technical complexity or cost. Each option was evaluated in terms of not only meeting or exceeding requirements but also with regards to ROI and total cost of ownership.

The results

TECHSY successfully developed and implemented a complete turn-key system that greatly enhanced the user’s ability to process and track large volume files of applicant and policy information, while at the same time allowed for easy data entry and modification of that data. A workflow process was implemented to review, correct, and approve of the information being processed through the batch files. Statistics were gathered and reported against to verify the results of the data entry. Reports were developed to assist the users in identifying problem areas, critical bottleneck points, data that needed review and approval by managers, and overall workload metrics. User, functional, and system testing was performed to validate the development effort. In addition, TECHSYS was instrumental in mentoring the existing users and IT staff on the new technologies used and details of the application for a smooth turnover.

The result was an application consisting of many windows, stored procedures, and web services that greatly enhanced the capability of Student Insurance to meet its increase load of information due to an expanse of business.

