

THE CHALLENGE

The South Carolina Technical College System (SCTCS) is responsible for the state-level development, implementation and coordination of postsecondary occupational and technical training and education. SCTCS is



comprised of 16 state technical colleges, offering academic and career programs that may culminate in an associate degree or a diploma, and a System Office located in Columbia. The System Office provides support and direction on certain matters for the technical colleges.

In 2003, as part of a system-wide initiative to de-centralize computer systems and applications, the South Carolina Technical College System Office was faced with replacing the asset inventory system in use by the individual technical colleges and the System Office. The de-centralization would impact computer systems and the business processes on which the systems were based.

The 16 colleges and the System Office each possess physical assets that must be accounted for and managed, ranging from office furniture and computers to vehicles and other equipment. The System Office has statutory responsibility for maintaining an accurate and current inventory of assets for the South Carolina Technical College System as a whole. Therefore the ability to acquire and maintain a consolidated record of the capital assets located at all colleges, as well as at the System Office itself, is mission critical.

A centralized legacy inventory system was being used to record, track and manage SCTCS assets. Inventoried items at each site were scanned, and the resulting data was uploaded to the legacy system at the System Office via a wide area network (WAN). At month-end and year-end the inventory system was reconciled to the accounting system.

As part of the de-centralization, each college had the option of implementing their own systems, or using a system provided by the System Office, if one was available. Regardless of a centralized or de-centralized computer systems environment, SCTCS still has the statutory responsibility to account for the physical assets. If the System Office could provide a solution that met both their own and the college's needs, each would benefit.

HOW TiBA HELPED

SCTCS initiated a Requirements Definition project for a solution to define a new Asset Inventory Management function at the System Office, and an Asset Inventory collection function enabling asset business processes to be performed by each college.

Through a process of conducting workshops, interviews and surveys with both the System Office and the colleges TiBA Solutions identified the detailed requirements for the minimum solution:

- a system to account for assets at the System Office that would replace the legacy system and apply new business processes, and
- a method to collect and audit inventory data from the colleges,
- a handheld scanning solution.

iSOLUTION™ Methodology

The effectiveness of our approach produces solid results: Quality applications delivered on time and within budget.

- Business priorities drive the planning
- Business requirements are central to the solution
- Business benefits are realized more rapidly

Additionally, working with the System Office, TiBA Solutions identified details for the key strategic requirements needed for the optimum solution:

- an inventory system that would meet the needs of both the System Office and the colleges while implementing the de-centralized business processes,
- an open interface for inventory that would support processing of transactions from a college enterprise business system if the college selected to implement their own inventory solution, and
- an open interface for the handheld scanning solution that could work with a sytem-wide standard scanning solution or a college-specific solution and available to the colleges if they decide to implement their own scanning solutions.

The new solution met all the users' requirements (System Office & college's) by providing a web-based application with corresponding web-based PDA solutions using web services.

An interesting note is that when the process started none of the colleges planned to implement the new application for themselves - the application eventually went live with all 16 colleges on board!

THE BUSINESS VALUE

The new Asset Inventory Management System supports key business functions at both the System Office and the technical colleges as well as meeting specific System Office administration requirements.

SYSTEM OFFICE BENEFITS

The Asset Inventory Management System brings important strategic benefits to the System Office:

- **Provides a common solution to users that takes advantage of current technologies.** Business solution technology leadership by providing a full-function, cost-effective, and usable solution to meet business requirements.
- **Meets statutory requirements and ensures compliance.** The System Office has access to all inventory data for the technical college system and the tools to support audit and control functions.
- **Delivers system-wide cost savings.** The technical colleges do not need to develop unique custom solutions to a common business need. The System Office provides the colleges a system that meets their business objectives and provides a cost effective solution. These savings are real and particularly important in the tight budget environment faced by the South Carolina legislature and all state agencies.

TECHNICAL COLLEGES BENEFITS

The Asset Inventory Management System will bring important strategic benefits to the technical colleges:

- **Business Value of using System Office as a Solutions provider.** System Office was able to provide a full function, cost-effective and system-wide solution to meet business requirements. The Technical Colleges benefit from using the Sytem Office as a valuable resource that can represent all the college's collectively when solving business problems.
- **Saves the cost of customizing COTS (Commercial Off The Shelf) solutions.** Technical colleges will not need to develop unique custom solutions to a common business need. Colleges can achieve the objectives of decentralization and avoid the cost of adding custom functionality to COTS to support required data; of creating a COTS scanner solution; and of further COTS customizations to export data to the System Office. These savings are real and particularly important in the tight budget environment.
- **Avoids the effort and risk of customizing COTS solutions.** Colleges can free up scarce technical resources and focus them on meeting other critical business needs.

TECHNOLOGIES USED:

- Microsoft .NET C#
- .NET Compact Framework
- Microsoft SQL Server 2000
- HP iPAQ PDA
- PocketPC 2002 O/S
- Windows 2003 Server

TECHNOLOGY BENEFITS

The Asset Inventory Management System is the first application to use the strategic technology and architecture that will be fundamental to future SCTCS initiatives. The overhead for this technology investment was amortized across multiple projects. After this project was completed, SCTCS benefited from the resulting technology readiness in multiple ways:

- **Utilized strategic new technology.** The application was built using SCTCS's strategic web-based technology. After its roll-out, the System Office now has a State-of-the-Market system architecture on which to build.
- **Established reusable technical infrastructure, coding standards, and design standards for use on future IRM projects.** Key components of the project have global applicability across SCTCS including enhancing the infrastructure to support Web-based solutions, and developing the coding and design standards for new technologies. These efforts will carry forward to future efforts and enable repeating past successes while continuing to build expertise.
- **Provided reusable software components (code) for use on future projects.** Key components of the system have global applicability, including the robust security function, the fundamental application setup and maintenance capabilities.

