

# Case Study

## *TECHSYS implements Web application for software vendor company*

### Point of Sale Website

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#### Services featured

- Business Analysis
- Business Object Design
- User Interface Design
- Application Development
- Database Development
- Training and Mentoring

#### Technology

- ASP.Net
- Visual Studio
- C#.Net
- Javascript
- ADO.Net
- SQL Server
- Sybase

This leading provider of business-to-business IT solutions and services needed to move their existing Point-of-Sale applications from a client server architecture to one based on the Web. Using TECHSYS expertise, POS applications were converted to a Web based architecture that allowed the company to realize the gains achieved with a distributed design. Assisted by TECHSYS, the company was able to increase efficiency while keeping the existing appearance of the application resulting in minimal impact to the user community.

#### The business issue

This client is one of the world's leading, single-source providers of business-to-business IT solutions and services. They help companies control their spending by easing the burden of selecting, purchasing and managing software for their enterprise.

Since 1983, this company has been delivering value-driven technology solutions across the globe through sales and operation centers in North America, Latin America, Europe and the Asia-Pacific region. Customers include large, multinational enterprises from the Fortune 500, as well as mid-sized organizations from a wide variety of industries.

They had several customer service and support systems based on a two-tier client server architecture which traditionally met its needs but were becoming cumbersome to distribute changes to its many diverse locations across North America and the United Kingdom. Although the desire to Web-enable the applications was a goal, a major requirement was to keep the look and feel of the existing applications to minimize the potential negative impact involved with re-training the existing user base on the new system.

What the customer needed was a completely new Web based application that took advantage of Web architecture, integrated with other internal applications, and was easy to distribute current and future changes.

## Point of Sale Website

TECHSYS Business Solutions – *Making  
Business Systems Work. Together*

### Our approach

The implementation of the new web site involved many steps conducted by the staff at TECHSYS. First, analysis of the current application was performed to gain valuable insight to the workings of those applications. Several users of the system were interviewed to gain knowledge of the business requirements and functionality of the application along with any new functionality that was desired by the user community. Since interfacing with existing legacy applications was also a requirement, these systems were also scrutinized to determine integration points.

In order to achieve the existing look-and-feel and a rich user interface for all applications, a wide range of web controls and JavaScript was used. This allowed the application to appear comparable to the previous fat client and greatly reduced the training necessary to bring the users up to speed on the new application. Integration was accomplished with several existing applications including customer accounts, customer orders, and purchasing systems. Interfacing to the Sybase database was utilized by integrating ADO.Net objects with a 3<sup>rd</sup> Party tool.

During the development of the application, feedback was solicited to verify that design goals were being addressed properly. At all phases of the implementation, TECHSYS expertise was called on to mentor and train the existing staff on all facets of Web application design, development, and interfacing with other applications.

### The results

The client was able to realize the benefits of a distributed application architecture as a direct result of the expertise TECHSYS provided. The pain and user-intensive delivery of application changes to many disparate locations was no longer an issue. As a result, application deployment was greatly simplified across the company's call centers located across the globe. Users were able to take advantage of a similar look and feel to their old client server applications which greatly reduced training time, while at the same time provided the needed functionality to maintain and increase the productivity of their work environment. By contributing to the project, TECHSYS demonstrated once again the value they bring to developing and deploying mission critical applications needed by their clients.



# Case Study

*TECHSYS converts software vendor applications to new technology*

## Order Entry Website

### Services featured

- Business Analysis
- User Interface Design
- Database Development
- Training and Mentoring

### Technology

- ASP.Net
- Visual Studio
- C#.Net
- Javascript
- ADO.Net
- SQL Server
- XML

This leading provider of business-to-business IT solutions and services needed to move their existing applications from a client server architecture to one based on the Web. TECHSYS was instrumental in converting critical applications to a Web design that allowed the company to realize the gains achieved with a distributed design. Based on this new architecture, the company was able to operate more efficiently and respond quicker to the needs of its user community.

### The business issue

This client is one of the world's leading, single-source providers of business-to-business IT solutions and services. They help companies control their spending by easing the burden of selecting, purchasing and managing software for their enterprise.

Since 1983, this company has been delivering value-driven technology solutions across the globe through sales and operation centers in North America, Latin America, Europe and the Asia-Pacific region. Customers include large, multinational enterprises from the Fortune 500, as well as mid-sized organizations from a wide variety of industries.

The client had a customer order entry system based on a two-tier client server architecture which traditionally met its needs but was becoming cumbersome to distribute changes to its many diverse locations. Additionally, there was no interface to the Web for product information to be obtained from its supplying vendors – the only way was to call the vendors for product specifications, which was time consuming and not user friendly. They had also purchased another company which had a legacy ASP application that needed to be integrated into existing order entry system.

What the client needed was a single Web based application that communicated with its Vendors applications, integrated with other internal applications, and was easy to distribute current and future changes.

## Order Entry Website

TECHSYS Business Solutions – *Making  
Business Systems Work. Together*

### Our approach

The first step in the web site implementation was to perform analysis on the current application. Many users of the system were interviewed to gain inside requirements of the current application. The legacy ASP website obtained through acquisition of another company was also analyzed to determine integration points. And CNET was examined to ascertain how to best utilize its delivery of product specifications to the end users. Visual prototypes were presented and reviewed in an effort to find the best “look and feel” for the site.

In order to achieve a true access point for all applications, a single signon architecture was implemented. Once the user had logged on to the system, personalization was performed based on the products purchased by the customer associated with the account. Web services were also implemented to make requests to CNET for software product information. Middle tier objects were implemented that handled the business rules and data transfer between the database and application layers. Since integration was needed between ASP.Net and classic ASP, session transfers were developed to handle different states of the sessions using XML. Also, ASP.Net being backward compatible allowed the project to have a gradual migration process where client usability was not affected.

During the development of the application, feedback was solicited to verify that design goals were being addressed properly. At all phases of the implementation, TECHSYS expertise was called on to mentor and train the existing staff on all facets of Web application design, development, and interfacing with other applications.

### The results

As a result of TECHSYS involvement in the project, the client was able to realize the benefits of a distributed application architecture. The pain and user-intensive delivery of application changes to many disparate locations was no longer an issue. Users were able to take advantage of a single point of entry to their applications by virtue of using single signon. Personalization greatly enhanced the user experience and productivity associated with targeting the right information at the right time. And user efficiency was gained by providing instant access to product specifications without the intervention of a CNET sales associate.



# Case Study

*TECHSYS helps world leader in convenience foods and beverages redesign and reengineer mobile application*

## Mobile Redesign

*TECHSYS provided analytical and design expertise to provide a cleaner, more efficient, and more usable mobile application*

### Services featured

- Business Analysis
- Usability Analysis
- Technical Analysis
- User Interface Design
- Application Design

### Technology

- Intermec Handheld
- Windows Mobile
- Microsoft .Net Compact Framework
- Sybase

This leading provider of convenient foods and beverages needed to redesign and reengineer their mobile application to bring it up to speed with new technology and make it more appealing, usable, and reliable. TECHSYS helped define and implement components and controls for the new application, in addition to providing creative, analytical, and technical expertise. Because of this reengineering effort, the company was able to reap the benefits of the new design with a more streamlined and cost effective application.

### The business issue

This company is a world leader in convenient foods and beverages, with revenues of more than \$32 billion and more than 157,000 employees. Their brands are available in nearly 200 countries and territories and generate sales at the retail level of about \$85 billion. Many of this company's brand names are more than 100-years-old, but the corporation is relatively young. They offer product choices to meet a broad variety of needs and preference -- from fun-for-you items to product choices that contribute to healthier lifestyles.

For the company's route sales representatives, the mobile application is their all-encompassing link between the company and the customer, and the primary point of access to all of the information in the system. To provide the most efficient processing to their users, the company realized that the user interface and navigation patterns of their existing mobile application needed to be updated to keep pace with technology and the increasing volume and breadth of data. In addition to the application requirements, this client needed to update the interface to the back end systems and databases for improved performance.

What the client needed was a clean and appealing user interface that in addition to being simple and intuitive to navigate provided the user with the proper tools to consistently find the desired information and handle the processes needed by the route sales representatives in the most efficient manner as possible.

## Mobile Redesign

*"This system gave us a leg up on the competition!" – Leader IT*

*Development Team*

### Our approach

The first step in the application redesign was to perform analysis on the current application. A variety of users were interviewed to gain important knowledge on the capabilities of the existing system in addition to new functionality that was desired. Information gathered from all of the sources was used to guide the design effort. Various hardware and software technologies were identified to provide the best possible options to the company. With the design goals identified, visual prototypes were created and reviewed in an effort to find the best "look and feel" for the application.

The application needed to be constructed in a way to make it as fast and easy to use as possible, implementing a modern display while at the same time taking into account efficient power management requirements. Windows Mobile and the .Net Compact Framework were used as the platform and extended as needed through the creation of various custom controls. Also, synchronization services were written to interface with the Sybase database.

At each stage of the process, feedback was solicited from the end user community in an effort to verify that design goals were being addressed properly. Input was welcomed and encouraged by TECHSYS, as it helped to continually improve the site design and operation. TECHSYS also worked closely with the client's existing technology staff to insure a cohesive team approach with mentoring and training provided where needed.

TECHSYS provided guidance on all of the options available to the client, 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

The result was an application which greatly enhanced the route sales representative's customer interaction when processing orders, conducting sales, and dealing with inventory. In addition, the route sales representative's job experience was improved by providing tasks lists, messaging, calendar functionality, and time card processing. The interface was thick application quality using top notch graphics with an appealing visual display, while remaining fast and reliable, and with efficient power consumption. The custom controls and services that were written were done according to best practices, which is conducive to reusability in the future. And because of a modular design approach, the new design elements were implemented in a time saving manner, providing quick results and broad visibility in meeting the design requirements.

