

Case Study

TECHSYS dramatically reduces run time of load process.

Process Optimization

Services featured

- Database Analysis
- Performance Recommendations
- Stored Procedure Tuning
- Testing

Technology

- SQL Server
- Stored Procedures

This services firm provides credit and debit card, payroll, and related processing services to a wide variety of merchants throughout the United States. As a result of phenomenal growth, existing processes developed long ago could not handle the throughput needed for the existing customer base. In stepped TECHSYS, to identify bottlenecks and correct problem functionality. Today, the company's processes can easily handle the existing workload with plenty of room for expansion.

The business issue

This client provides credit and debit card, payroll, and related processing services to restaurant, hotel, and retail merchants throughout the United States. They provide services to over 110,000 merchants with 1010 sales representatives and more than 600 employees in operations, information technology, marketing, administration, and management positions. As one of the nation's leading independently owned payment processors, they handle all elements of both credit and debit card transaction processing offering a host of services that make one-stop payment processing a reality for merchants. Additionally, the company provides the services for fraud monitoring, resolving disputed transactions, monthly statements, applications for restaurants and hotels/resorts and automatic or manual batch closings.

These services also include fraud reporting against a multitude of credit card transactions based on various user criteria. With the criteria including such data as unusual activity, checking for multiple run time errors, spotting higher than average ticket sales and inflated tips information, obviously the accumulated records grew quickly. Over time, the company's data management processes had become inefficient, costly, and cumbersome to maintain, requiring investigation into ways of making these processes more efficient and performing optimally.

What the company needed was assistance in analyzing and implementing changes to existing systems to realize any gains that could be achieved. Due to a history of successful performance enhancing and cost reducing

Process Optimization

TECHSYS offered a series of solution steps for addressing critical data issues while remaining focused on the critical business objective.

- *Optimizing application performance*
- *Creating open access to more users*
- *Designed to support increase in capacity*
- *Preparing for rapid escalation in business volume*

“For the first time in the company’s history, our company has reached significant milestones, thus breaking a new record by reaching \$3.4 billion in processing volume in one month.”

News Release

implementations of previous systems, the company looked no further than TECHSYS.

Our approach

The first step in assisting the client in this endeavor was to perform analysis to determine where the slow running processes were and what could be done to improve them. This involved analyzing the current business processes, database objects, and stored procedures associated with existing operations. Documentation was provided to the client identifying the problem areas as well as recommendations to correct or enhance those areas. A clear roadmap was provided to implement the changes along with specific modifications that would greatly improve operational efficiency. TECHSYS implemented the approved changes in accordance with company IT standards, and participated side-by-side with the DBA staff in testing and reviewing the results of the changes.

The results

With the changes implemented by TECHSYS, the client realized a tremendous gain in execution time and operational efficiency. Processes that took over 10 hours to run are now completing in less than an hour. This allowed many more transactions to be processed, created opportunity for more customers and merchants to be added and prepared the company for greater expansion now and in the future.



Case Study

TECHSYS helps financial services firm bring outsourced system in-house.

Credit Card Processing

Services featured

- Application Architecture
- User Interface Design
- Application Design
- Database Design
- Testing
- Training and Mentoring

Technology

- Visual Studio
- C#.Net
- SQL Server
- Visio

This services firm provides credit and debit card, payroll, and related processing services to a wide variety of merchants throughout the United States. The Company used a third party vendor to handle all its data processing needs. In order to cut costs and respond the users demand for quick turnaround time when implementing changes, the company decided to bring those services in-house. TECHSYS answered the company's call for assistance in this endeavor and today they handle all their processes internal realizing extraordinary cost savings and end user satisfaction.

The business issue

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Traditionally, the client used an offsite vendor to handle all of its processing needs. Any change needed to improve or enhance the system had to go through this third party, which resulted in lengthy turnaround time for implementing these changes. In addition, significant expenses were being incurred due to an expanse of business in the credit card processing arena and changing functionality of the systems themselves.

What the client needed was assistance in bringing their mission critical systems in-house. They engaged TECHSYS as its partner of choice for guaranteeing a successful implementation of this magnitude.

Credit Card Processing

TECHSYS Business Solutions – *Making
Business Systems Work Together*

Our approach

In an undertaking of this enormity, successful architecting of the system is paramount, due to the high volume of transactions and response time needed by the user community to stay competitive in the marketplace. TECHSYS architected and implemented a multi-tier design methodology with high performance in mind while at the same time allowing for ease of expansion and scalability. This framework was developed to address object oriented methodologies and standards implementation. Using the business rules provided by the company's business analysts, the application was developed using an iterative approach with constant input from the client team. In addition to migrating over existing functionality, new functionality was also furnished to enhance the user experience and satisfy the business requirements, including statistical reports and more detail information available to the customer. Middle tier and data layer objects were developed to provide the basis of functionality, and data transfer objects were developed to reformat the credit card information into structures readable by the major credit card companies. Also, the system interfaced with many other internal systems, as well as Microsoft Great Plains accounting software.

Since the client has over 120,000 customers that would be impacted by the implementation of this system, a staged approach was taken. Each month, a new set of customers would be brought on line after thorough evaluation of the results of the migration. Care was taken to include all levels of IT involvement as well as the user community to guarantee a successful implementation. During the implementation, the application was converted from ASP.Net 1.1 to ASP.Net 2.0, Visual Studio 2003 to Visual Studio 2005, and SQL Server 2000 to SQL Server 2005.

The results

As a result of TECHSYS' involvement in the project, tremendous cost savings were realized by the client and the implementation was achieved in an expeditious manner due to the successful staged approach, without burdening the customer base with downtime. With the changes implemented by TECHSYS, the client realized a tremendous gain in execution time and operational efficiency. Now in control of their own internal system, the IT department is able to deliver changes requested by the user community in a short time span. And system expansion can take plan with a reduced amount of effort now and in the future.

