



## SUCCESS STORY.

# CRM Software Solution Modernization & Re-Engineering

### About the Client

The client is an enterprise CRM software company. The software has rich features and functionality to manage sales, especially for manufacturing and distribution companies selling to other businesses.

### Business Challenge

The client's software had Windows-based client-server architecture while leading CRM players had launched new-generation web architecture products. Web-based CRM for small and mid-sized businesses was a growing area of demand and several start-ups were competing to gain market share. Due to this, vendors with older client-server technology were under pressure to upgrade their products.

The client responded to these market forces by starting an in-house initiative to migrate its CRM to a web-based framework. The project encountered time and cost delays and was on the verge of being shelved. At this point, the client sought Silicus' professional services to help with the troubled project.

### Silicus Solution

#### REDEVELOPING FROM SCRATCH

After analyzing all of the product source code, Silicus recommended developing the software from scratch, which the client approved. Silicus started by mapping the functional and non-functional software specifications onto a Microsoft .NET application. This included building an infrastructure with common application blocks based on design and development best practices.

Silicus' Microsoft .NET architects designed the software based on performance and scalability requirements. Lowering the Total Cost of Ownership (TCO) for the web-based application was also a key design objective.

#### APPLICATION AND SYSTEM ARCHITECTURE

The team developed a set of framework components and application blocks that reflected the Microsoft .NET framework, and Microsoft ASP.NET and Microsoft ADO.NET best practices. These were designed to meet security, scalability, performance and availability metrics.

The system architecture was designed for integration with the customer and partner solutions. The tasks involved in the project were:

#### BUSINESS RULES REENGINEERING

Business rules were extracted from the two-tier client-server application for the business logic layer in a web-based architecture. This was challenging as it was done manually in the absence of tools. COM+ design was adopted for easier hosting of application servers.

#### FEATURE MAPPING

The client-server application contained UI features that had tightly coupled data controls, tabs, multiple grids and pop windows. These items were re-engineered for a browser-based environment.

#### FEATURE ENHANCEMENTS & SMART CLIENT FOR DISCONNECTED USERS

The client wanted CRM specific enhancements such as web integration with MS Outlook and synchronization module for disconnected users. These enhancements were incorporated into the final deliverables

#### APPLICATION PERFORMANCE EXPECTATIONS

The Microsoft .NET experts used best principles and practices for designing a high-performance application. Browser performance was improved by developing a lookup caching utility for quick browser response.

## Technologies Used



**LANGUAGE**  
C#, ASP.NET



**DATABASE**  
SQL Server



**WEB SERVER**  
IIS



**FRAMEWORKS**  
Microsoft .NET 2.0



**TOOLS**  
Crystal Reports



**ARCHITECTURE**  
Web Services Architecture  
with Smart Client Features

## Client Benefits

#### RESCUED A FLAMING PROJECT AND ENSURED TIME-TO-MARKET

Silicus Microsoft .NET experts quickly took control of the project, fixed the architectural issues, and delivered a quality product that won top awards from TechTarget's SearchCRM.com

#### SOFTWARE ENGINEERING EXPERTISE FROM A LOW COST LOCATION

Silicus delivered its Microsoft .NET software development services from offshore, reducing software engineering costs to stay within the constraints of a tight budget.

#### ROBUST SOFTWARE DESIGN

An efficient, effective and versatile software solution that served current needs and was extensible for future requirements was designed by Silicus.

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