CASE STUDY 2:

Cross Track: A backflow prevention assembly management system

<u>Customer:</u>

A large public utilities organization

<u>Project Description:</u>

Cross Track is a desktop application in use by the client's Water Quality Division for printing forms, entering test data, and creating reports. The system is developed as a client server application and includes manual updates for PDF and database synchronization.

The intent of this project is to replace their legacy system with a state-of-art web-based application that does not require any manual intervention, is easy to use, and costs less to maintain.

<u>Solutions provided by the product:</u>

This project is a web portal developed for the client's Water Quality Division for monitoring and managing the backflow assemblies. By using this application, the public department management can monitor the condition of the backflow prevention assemblies installed in the entire city. Erroneous assemblies can be escalated to the health department so that immediate action is taken to prevent any health hazard due to contamination of public water.

The features of this application are:

- It is a role-based application, with each user having specified permissions in the application, as directed by the client
- It has the ability to generate a wide range of pre-defined reports
- It has the ability to query any type of information and extract the relevant data in multiple formats, such as assembly list in Microsoft (MS) Excel format or test report to portable document format (PDF) or MS Word format
- It has the ability to do advanced searching, sorting and grouping of all grid data.
- It has the ability to generate various reports to measure the status and statistics of the assembly
- It generates all reports with trending graphs like pie chart, bar chart and stacked chart
- It has a message broadcast feature to share messages between various users
- It has a posting schedule and calendar activities which can be shared between various users
- System automation is configurable by administrators
- It has a monthly customer notice batch generation which can be uploaded into various FTP locations and can be accessed externally
- It has a dynamic mail template editor with a telerik text editor
- It has data exporting and importing functionalities across various external databases in various formats such as XML, web service, etc.
- It has the ability to track the activity of a user with date and time

- Its database can maintain more than five years' history of records

Technologies used:

ASP.Net 3.5, C#, MS SQL Server 2008 R2, MVC3 Razor, Telerick Controls, and Jquery

Benefits for the client:

- It has cross-department access for the Department of Public Health (DPH) to view pertinent information
- All inspection notices can be sent through regular mail (postal with inspection copies) and email
- There is clear visibility for the management to track assemblies and site information
- Automation process is installed, which will reduce the job and time of the human resource