

## ABSTRACT

QMWeb is a web-based quality management system designed for a data processing company's Production and Information Technology departments. It consolidates several quality management concepts and tools such as document control, statistical process control, issue management and preventive action. Most importantly, it includes continuous improvement's human element by building in methods of motivating the work team and providing ways for all members to contribute to the improvement process.

The methodology involves an analysis of the company's present quality assurance system and the main reasons for rework in the production of its products, gathering and creating tools that may help reduce this rework, design of a web site that fuses these tools into a coherent quality management system, evaluation of advantages and limitations of the system, refinement of web site features and a benefit vs. cost analysis of the project.

The web site is implemented using ASP and VBScript. All web site data are stored in a SQL Server 2000 database and supported with SQL scripts and transformation services that aid in porting live production data into the web server. Charts are created with MS Office 2000 Web Components.

A benefit/cost study of 4 options for implementing the web site at the company shows a break-even of 1.54 to 4.36 years. This is considering both rework and overtime cuts for coding as benefits and development man-hours for costs.

Converting to a bi-lingual site, adding security features and email services are given as recommendations to further improve the web site.