



Project Profile: Web-based Workflow System

Business Situation

The client processes millions of medical insurance claims annually in more than 20 office locations. The physical movement of paper throughout the entire workflow, storage and archival for future reference at the end of the workflow characterized the mostly manual processes. Each office had its own set of processes and workflows each geared towards their special requirements.

The company intended to increase the processing volume and the process efficiency through a new Workflow system that would accurately track documents as they traverse through the work environments. The application had to be flexible enough to adapt to the unique set of requirements of every office. A robust imaging and document management system should eliminate the paper flow. As an additional requirement the client requested a "gateway" within the new system that allowed for the seamless integration with other systems, for example [insurance claim review](#).

The client had spent considerable effort and time to specify the requirements and to analyze workflow solutions offered in the market. The final decision to implement the new system in-house was based on the fact that standard solutions did not correspond to the requirements in a satisfactory manner.

The Role of Masfin Consulting

The Masfin consulting team covered all aspects of the development from project management support, needs assessment, design and development. After studying the clients' business workflows and operational environments, Masfin Consulting designed a finite state based solution to model business workflow processes. Within a time-frame of two-months the project was live and in production.

At the entry point into the processing environment the documents are scanned into the system and are typed as claim, insurance bill, police report, provider letter, attorney letter, etc. Several documents of the same or different types are virtually bound together into a binder. The binders are used to view various documents associated to a processing case, e.g. a "claim material for a patient" that may consist of police report, bills, provider letters, etc. In addition, each location can have different sub-workflows defined for different document types. All the workflows and documents at various locations can be viewed from the enterprise-wide view down to the individual processor detail as long as the user owns the appropriate security permissions.



After the scanning, type assignment and organization, the documents are moved electronically from one state and bin to the next. Each of these state transitions and annotations are automatically logged and audited to track productivity and to identify bottlenecks.

A "VCR Control" feature was implemented into the basic workflow system to serve as a "Gateway" for other applications that need to use workflow and document management functionality. Any service of the workflow system can then be accessed through the VCR control's buttons.

A .NET feature was added to the workflow application, this kept the basic Workflow application independent of specific "meta-child" applications. These .NETs are run via Workflow, but Workflow itself only knows "how to run" and does not know anything about the specific business rules.

Benefits of the solution

The workflow system in production and has proven to be able to support the processing of millions of claims. It was rolled out successfully to several locations. A company-wide rollout and the marketing of the system as a leased product are intended over currently underway. Benefits of the solution include:

- ❑ Automated performance tracking
- ❑ Enterprise-wide operations reporting
- ❑ Increased quality of client/provider services
- ❑ 40% productivity increase
- ❑ Error reduction
- ❑ Savings in paper storage
- ❑ Identification and quantification of workflow bottlenecks
- ❑ Short learning curve and ease-of-use through explorer 'look-and-feel'

Products used

- ❑ MS Visual Studio Suite, Visual Basic, Internet Explorer, ASP, Kodak Imaging, Windows DNA, COM+, MTS, XML, Power-Designer, MS-SQL Server and Kofax-Ascent image capture software