EDGEWATER TECHNOLOGY

A Mid-sized Life and Annuity Company located in the Mid-West partners with Edgewater Technology to Automate its Policy Generation Process

Customized solution empowers life and annuity company to automatically generate policy delivery documentation.

Edgewater Technology's solution will enable the company to:

- **Reduce the time, cost and resources required to produce a policy package;**
- **Improve the quality, accuracy and compliance of its policy documents.**

Additional benefits:

- **New product roll-out cycle will shorten given the ability to re-use policy text elements and documented business rules;**
- **Printing costs will decrease as policy re-prints due to errors will diminish;**
- **Mailing costs will be reduced as agents will have the option of receiving the policy in an electronic format;**
- **Customer and claims service costs will decrease as the company experiences a reduction in liability exposure for non-compliance with state and federal regulations.**

Life Insurance and Annuities

For over 90 years, this mid-sized Life and Annuity Company and its family of insurance companies have been committed to providing insurance and financial products to individuals needs. They listen to what individuals want from an insurance policy or annuity and strive to provide the ideal solution for each situation.

The Challenge

The company utilized a completely manual process for assembling policy documentation from four sets of source documents printed at different times and locations. A policy assembly unit comprised of seven employees was constructed for this process. The unit was responsible for compiling the following sets of documents, in a proper sequence:

- Contract data pages;
- Adverse underwriting letters;
- Any policy amendments;
- Copies of the application;
- Policy illustration.

In addition to the standard policy components listed above, the unit manually included other policy inserts such as return mail envelopes, and then mailed the completed package to the insured or annuitant. This time consuming process significantly impaired their ability to roll-out new products, negatively impacted customer satisfaction levels, and compromised the sales process.

The Business Solution

Edgewater representatives met with the company's executives to identify key objectives. They were identified as follows:

- Leverage an automated process across different product lines in order to support growth strategies;
- Maintain lead on competition;
- Minimize human resource requirements to achieve growth;
- Consolidate diverse systems and processes resulting from acquisitions;
- Deliver new products to marketplace in a quicker;
- Reduce policy application turnaround time.

Considering these objectives, Edgewater conducted an analysis of the company's policy generation process and determined that an automated solution would not only meet most of their objectives, but would also greatly support their primary interest of bringing new products to the market faster.

The Edgewater team initially consisted of one business strategist, one business analyst, one systems architect and one systems developer. This team was quickly aligned with a technology partner and resources from the client's systems and operations areas. The joint project team began the process of analyzing the disparate systems which control the new business process, supply insured information and policy values, and document amendments to the policy. Edgewater determined that the following systems would require interfaces:

- Workflow engine (AWD)
- Policy administration system
- Illustration system—used to illustrate future policy values
- Correspondence system—used to document amendments to the policies

From this review, Edgewater captured the data elements required to produce the policies and used this analysis to design the interfaces necessary for supplying the data to the new policy automation system.

In tandem to the interface analysis, the team worked to identify products that the client wished to support with the new policy automation system. Three products were selected for the primary roll-out with a phased approach planned for implementing the remaining. Edgewater worked with the client team to locate the appropriate policy documents, determine the format and order for producing the policy pages, and document the product-based business rules which control the content for each policy. These business rules needed to include not only their requirements, such as the appropriate rider language for policies including Waiver of Premium, but also text mandated by state and federal regulations.

After compiling the business and technical requirements, Edgewater began the process of adding the data from the components that interact with the policy administration system, the workflow system, the illustration system, and the correspondence system, to the database for assembly into a printed policy. The application reads the policy data and images, merging this data with verbiage according to the rules associated with the product, riders, jurisdiction, etc. The output from the system is a PDF ready for printing and delivery to agents via fax through the existing AWD infrastructure, email or US Mail. The policy automation processing system ensures error-free, compliant documents with nominal manual intervention.

The project has successfully demonstrated that a mid-sized Life and Annuity Company can automate the preparation and delivery of the policy documentation from the time the policy is approved by underwriting to the point that the policy package is printed and readied for mailing.

The Technology Solution

The solution for the company's Document Automation initiative utilized an off-the-shelf packaged product to produce the policy documents. In order to effectively employ this product, Edgewater implemented several custom interfaces to their existing systems, each of which fed a data gathering service. The data gathering service stores numerous policy data elements in a relational database accessed by the Document Automation process.

The system architecture was designed based on the systems integration requirements described above with the current IT capabilities and technology direction in mind. The company's technology philosophy is "keep it simple and solid". Edgewater's design has reused as much existing infrastructure and past development efforts as possible in an attempt to follow this principle. The complexity of the functional requirements, number of system integration points, and the diversity of those interfaces made choosing a consistent toolset challenging. In order to meet the requirements, a combination of the .NET framework and their adopted Java 2 Enterprise Edition (J2EE) framework was utilized.

Many of the major components required to support the new Policy Document Automation Initiative are present in the company's current IT infrastructure. The new major components are the Policy Assembly Server and Policy Assembly Database Server. The Policy Assembly Server will run Windows 2000 Server and host the Policy Data Gatherer, Correspondence Manager, Reprint Requester, and the Document Automation components. The Policy Assembly Database Server runs Windows 2000 Server and hosts the SQL Server 2000 database that will drive the policy generation process. Their current Lotus Notes email server and current faxing infrastructure was also used.

Technologies and Tools

The following production hardware and software additions were required to support the new system:

Policy Data Storage Server

- Intel Pentium 4 with 512MB of RAM and 40 GIG of storage
- Microsoft Windows 2000 Server
- SQL Server 2000

Policy Assembly Server

- Intel Pentium 4 with 2 CPUs and 2 GIG of RAM and 9 GIG of storage
- Microsoft Windows 2000 Server
- Document Sciences xPression
- IBM WebSphere 4.0+ Advanced or Enterprise Edition
- Custom Java Server Pages
- Custom Java Web Service
- The .NET framework
- Custom C# DLL and processes (Data Gatherer)
- Third-party image conversion and utility libraries
- AWD Client for NT v.2.3.2
- AWD View for CICS
- Lewis & Ellis InsDesk software and supporting DLLs and OCXs
- Visual Basic 6.0 runtime (to support InsDesk)

Citrix Server(s) (Existing hardware)

- Custom C++ DLL (AWD Exit)
- Microsoft Internet Explorer 6.0
- SUN Java 1.3 runtime

Compliance Workstation (Existing hardware)

- xPression Design
- SUN Java 1.3 runtime

Additional hardware and software was also required to support development and quality assurance.