State of Maine Revenue Services Modernizes Tax System and reduces IT costs with SoftwareMining

Business Profile
Maine Revenue Services manages income, sales, and corporate taxation in the State. The mission of Maine Revenue Services is to be the most effective, innovative agency in Maine state government, providing the citizens of Maine with outstanding service.

Business Challenges
- Provide better service to Maine taxpayers while reducing overall cost of IT
- Maintain high level of responsiveness to legislative tax changes
- Modernize existing systems without disrupting productivity of workforce or losing important system enhancements.
- Enhance attractiveness of Maine Revenue Services as an employer in the technology sector.

Technology Strategy
Use SoftwareMining's CORECT software to transform hundreds of mainframe COBOL batch and CICS interactive programs to object-oriented JAVA code. SoftwareMining's platform provides an AI based approach to take monolithic COBOL code and create JAVA or C# code that is highly maintainable and allows continuity of business functions.

Benefits
- Productivity of workers has improved.
- All enhancements to the original system remained intact and no functionality was lost
- Training on the new platform was minimal
- Risk was minimal.
- 70% less expensive than installing a new package
- Ability to hire new talent has improved

The State of Maine Challenge:
In 2002, the state of Maine started evaluating how it could provide better service to Maine taxpayers and reduce the overall cost of IT. The existing tax system, known as MATS (Maine Automated Tax System), was good and had many customizations, but it was showing its age. Installed in the mid 1990s, written in COBOL, using CICS and DB2, and running on zOS, it did not always work well with more current IT tools. Integration was a problem. It was cumbersome to switch between functions, or to use the MATS data with popular desktop tools. It was becoming increasingly difficult to be responsive to change requests and enhancements. Lastly, being able to continue to maintain the complex COBOL programs in the future was a major concern. COBOL is no longer taught at most universities and colleges. Students today are being trained on more modern languages, such as JAVA and C# that take advantage of new technologies. Maine was concerned that it would not be able attract the best and brightest talent and might be seen as a less desirable employer with antiquated technology.
The Project

The state evaluated several options including a manual rewrite, installing a new package, or transforming their existing system into Java. The manual rewrite would have taken too long and been too prone to error. Using a new package meant that the customizations they had in their current system would have to be given up. There would also be a huge learning curve. In the end, the transformation of their existing system gave them a more modern and maintainable code base and allowed them to keep the functionality they needed.

The project was split into 4 phases, based on functionality. Approximately 600 programs were converted, including batch and interactive, serving 250 on-line users.

The project enabled a smooth transition with relatively few issues. All enhancements to the original system remained intact and no functionality was lost. Additionally, testing was much simplified since the application functionality was completely familiar.

Maine Revenue Services estimated that the overall costs of this project were 70% less expensive than purchasing a replacement system. In addition, because the system was transformed as opposed to replaced, training and training costs were virtually eliminated, saving even more.

With a single transformation project the goals of Maine Revenue Services have been met and surpassed. Uniquely, SoftwareMining has enabled the modernization of the business application with no loss of functionality and delivered a maintainable environment to meet business response goals.

According to industry analysts more than 70% of IT budgets are spent on maintenance of legacy systems. Using our technology, Maine has been able to reduce this cost dramatically while simultaneously improving IT and business services delivery.

The System Integrator

Revenue Solutions Inc. (RSI) was selected to assist in the modernization project, and to use SoftwareMining tools for the conversion of COBOL Application to Java. RSI specializes in helping government agencies, primarily tax, labor and child support, to meet their business objectives of streamlining operations and improving compliance using enabling information technologies. 4 full-time programmers from Maine Revenue Services were assigned per project phase, plus 2 part time DBA/tech environment people. Additionally, Q/A testing resources from both MRS and RSI were assigned to each phase. Hardware and software services were provided by Maine's Office of Information Technology.

Comments

"We are seeing great benefits from this transformation program. Not only have we achieved our cost and maintainability goals but our users are now more productive and can give a better service to the citizens of Maine." said Karin Peterson, Maine Revenue Services

"The major advantage of the SoftwareMining product was simply that it worked. This was clearly the best and only feasible way to effect this transformation process and enabled us to give a more effective and competitive service to Maine" said Bruce Baur, CTO; RSI Inc.

"We are delighted to be able to enable this modernization program to Maine. With this transformation process automation the lifecycle of these vital legacy systems can be extended without compromising their function or maintainability." said Cyrus Montakab, CEO; SoftwareMining
**About SoftwareMining** delivers software and services to enable organizations to modernize their legacy systems. Applications and software infrastructure.

Many enterprises rely on COBOL-based legacy applications – they run their businesses on them, they work and they are reliable. Nevertheless the cost and maintainability of the applications are becoming more problematic. The legacy re-engineering suite from **SoftwareMining** can enable effective maintenance, understanding and re-generation of the legacy applications and fundamentally the preservation of their value to the business.

**To find out more about working with softwaremining and our products, contact us at your nearest sales office or by email at** sales@softwaremining.com