

IMPLEMENTATION STUDY: WEST BEND MUTUAL INSURANCE

Reducing Development Risk and Increasing
Quality via Compuware CARS

COMPANY

West Bend Mutual Insurance
West Bend, Wisconsin

PRODUCT SOLUTION COMPONENTS

Compuware Application Reliability Solution
(CARS)

INDUSTRY

Property and Casualty Insurance

CHALLENGES

West Bend is a 100-year old insurance company that needed to deploy Web-based applications to its independent agents more quickly, efficiently, and consistently than it had previously been doing. Not only did it need to deliver more applications more frequently in order to remain ahead of the competition, but it needed to institute internal processes to increase development efficiency, quality, and on-going manageability of the applications.

SOLUTION

West Bend selected Compuware CARS to help it reduce overall application development risk and increase the quality and consistency of its development process. As part of the CARS solution, West Bend first used Compuware professional services to help define the appropriate development and deployment roles and processes. West Bend then deployed Compuware products to aid in testing and development, as well as the CARS Application Quality Workbench to manage application development workflow and reporting.

Overview

All organizations doing application development face a series of risks and challenges: Will the application be released on time? Will the quality of the application be good or will there be unexpected problems? What about performance—will the application perform as needed when it's released in real-world scenarios? Can the deployment and future changes be managed with minimal effort?

While these are not new issues, many companies find these challenges have taken on new significance because of the time pressures of today's business cycles and the increased role of Web-based applications. Instead of simply developing applications for internal users, most IT groups now find themselves creating full software products—applications that must be released to customers, partners, and prospects with all the accompanying expectations of stability, scalability, and rock-solid quality.

Unfortunately, many development groups do not have the infrastructure, processes, or tools in place to guarantee that such applications can be delivered on time with the appropriate quality. Nor do they have the processes or metrics available internally to make informed decisions on development priorities, project deadlines, or the ability to balance development risks.

A good example of these new pressures and how an organization can respond successfully can be seen in the example of the West Bend Mutual Insurance Company and how they were able to turn their development process into a metrics-driven one in

which they could reduce development risk and manage multiple requirements simultaneously.

Today's insurance industry is very different from the one that existed when West Bend Mutual Insurance Company was established over one hundred years ago. Independent agencies are one of the primary channels through which insurance is sold, and companies like West Bend must ensure that doing business is easy and effective for their independent agents. As with most businesses, the Internet has altered the way that insurance companies and agents interact. West Bend has seen a significant move toward web-based communications with its channel, and the company has been working hard to keep pace of the shift in technology.

Five years ago, West Bend saw that it would have to increase support for its independent agents through the delivery of additional Web-based applications, both to stay competitive with other insurance companies as well as to give the agents the latest tools to help win business. Until then, West Bend's application development effort had mainly been focused on internal applications, and a very controlled enterprise packaged application for agent's use.

"We needed very flexible application development approaches if we were going to continue to be successful with our agent channel," says Amy Buechel, Vice President, IT Business Solutions, West Bend Mutual Insurance Company. West Bend knew that the future was going to require them to deliver more applications more frequently to its users (i.e., agents) with solid quality and performance characteristics. The results of this shift were significant, and West Bend quickly realized there is a tremendous difference between maintaining a legacy application and becoming a development shop capable of quickly creating web applications to meet changing business needs.

One key change was the need for stronger processes to support applications development. This Upside Research Implementation Study reveals how West Bend successfully made the transition to a process-oriented development IT department by combining executive vision, committed teamwork, and professional services and tools from Compuware Corporation. West Bend shares its best practices and lessons learned that are valuable for other companies that find the need to lower application development risk while increasing application quality and overall development efficiency.

WHAT'S INSIDE WEST BEND

Operating Systems – Primarily Microsoft, moving to .NET for some applications

Development – Microsoft Visual Basic

Development Management – Compuware CARS and Application Quality Workbench

Testing & QA – Compuware Reconcile, QA Director, TrackRecord, QARun

Back-end systems – Microsoft SQL in web environment and IBM DB2 on mainframe.

Business Problem

A key consideration for West Bend was that, like all insurance companies, its independent agents are not employees. Agents offer and sell West Bend products in addition to competitors' products. Therefore, West Bend has to make it as easy as possible for agents to conduct business and sell West Bend insurance products. If not, then the agents can easily take the business to the competitors. Realizing this, West Bend made a strategic decision in the late 1990s to begin developing Web applications that would meet insurance agents' needs for having fast and easy access to policy information.

But this also meant that West Bend would have to move from developing a single, monolithic packaged application for internal use to being able to deliver timely, robust new applications that could address changing agent needs. West Bend would essentially need to re-invent themselves as a software vendor—being able to deliver and maintain multiple releases of multiple software applications that could meet its customers' (i.e., agents') business needs. It would need the structure and processes to support full-scale, multi-project development.

West Bend realized it was important to create a solid infrastructure with flexible (but standardized) processes behind the application development efforts in order to be able to continually produce high-quality applications for its agents. The company took the time to make a strategic decision about its development process, and spent two years transitioning its IT staff of 60 to a business-driven development process.

The entire project was championed by West Bend's CIO Tom Lindell, who realized the strategic opportunity to build a foundation for application development that would enable West Bend to meet the new requirements for delivering applications. Because West Bend was making a radical change in the structure and function of its IT staff, the company partnered with Compuware Corporation to help build a flexible development process that would meet its needs. Specifically, West Bend wanted to:

- Build a framework for development that would be used on every new development project to ensure consistency, code reuse, and quality assurance.
- Focus on building a framework that would help alleviate redundancies in the development processes and eliminate some of the complexities.
- Define the appropriate roles and responsibilities for developers, business analysts, technical analysts, quality control, release coordinators, and database administrators, including efficient processes for communication among team members.
- Transition existing staff into the new roles.
- Develop training program and ongoing knowledge transfer to ensure development process was practiced and adopted throughout company.

Establishing these objectives at the beginning of the project helped West Bend to focus on the task at hand and not get sidetracked by other projects. The company made a commitment to building a strong development process, and set about to make the transition.

Solution Overview

The entire process took eighteen months (see figure 1), from West Bend's initial contact with Compuware to the rollout of the first development project using the new processes. By summer 2002, West Bend was able to use the development framework in new projects. Once the company made decisions about what the development process should include, it started looking at its existing staff and the way they were doing business.

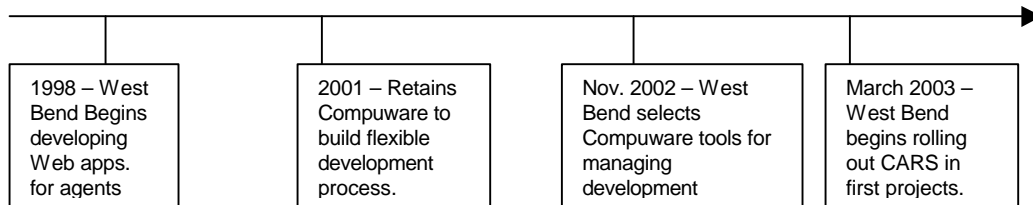


Figure 1: While overall development of West Bend Mutual's revised development process for Web-based applications took a while to define, they were able to begin quickly rolling out applications based on the process once it was deployed

To do this, Compuware worked closely with internal subject matter experts to understand each role within the development staff. From this information, the company worked with West Bend to develop a roles-based framework that reflected the various roles within the development process. Roles such as developer, project manager, business analyst, technical analyst, quality control, release coordinator, and database administrator were all included in the framework, and helped map out specific, standard processes for each of these roles to follow during the course of a project. In addition to the roles, another important component of the framework is establishing what deliverables are necessary throughout development. West Bend worked with Compuware to determine how they should be documented and how they would be communicated to the next individual in the process.

Early on in the process, West Bend considered combining its process foundation work with the actual selection and implementation of the tools to help facilitate the development process. However, the IT managers felt the entire new process was so radically different than what the staff had been doing, it wanted the staff to understand fundamentally what West Bend was trying to accomplish with its new development framework. Tools would add complexity and lose something of the learning experience, because from the beginning they would be completing several processes for the users.

Making this decision contributed to the challenges of the entire project. At times, IT felt the task was too daunting to succeed. However, the strong support from the officer group at West Bend helped the group make it through the difficult times, and focus on the long-term, strategic goals. Perhaps the greatest challenge for the IT staff was for business analysts and quality control staff, who had to face new terminology and new documentation with their new roles. West Bend had fifty-five members of its staff that were coming into the new framework with varying levels of expertise. The language of the framework was different from what they were used to, and they needed to take their skills to a very different level to use the framework. Examples of the types of changes the new framework brought include:

- Learning new terminology like use cases.
- Instituting quite a bit of standardization at development level.
- Adding new protocols and standards at the systems architecture level.
- Adding an entire release coordination process that dramatically improved the way West Bend approached releases to production.
- Articulating to staff the need to maintain the roles they were currently in. For example, a person may be a project manager in one context, but for a specific project that person is a business analyst and has to adhere to the business analyst role to make the process work.

It has taken time, but these members of the team are beginning to see the value of how their new roles fit into the larger picture at West Bend. West Bend's IT managers understood how important it was to gain buy-in from the staff to make the entire framework successful. Therefore, once the framework was developed, West Bend began rolling out parts of it in existing projects. Staff members paid attention to these changes, and realized they were able to get better information from the new processes, information that ultimately helped them complete their tasks better and more easily.

Once the framework was implemented (in late 2002) West Bend went through an evaluation of application development management and testing tools to determine the best fit for helping to automate some of the functions in the new development framework. The company had an existing tool in house but after close examination determined that Compuware's suite of tools was a better fit in terms of leveraging the output of the individual tools between products. West Bend deployed Compuware's Reconcile, QADirector, and TrackRecord and QARun initially and then the entire CARS Application Quality Workbench. The Application Quality Workbench provides a cohesive layer that ties the individual tools together and enables West Bend to access development information at a global level.

In January 2003, West Bend began to use some of the Compuware tools to augment its new development framework.

TrackRecord was the first tool it put into use, and West Bend is pleased with its ability to manage defect tracking and do dynamic project reporting. In March of 2003, the company began to implement CARS, Compuware's Application Reliability Solution that combines testing processes, automation tools, and experienced personnel to help organizations control and manage application delivery to reduce risk and increase quality.

"We want to make sure we deliver applications in a timely fashion and realize successful application deployments. CARS gives us live access to metrics that enable our managers to assess how a project is progressing and make better decisions based on the information." Amy Buechel, VP, IT Business Solutions, West Bend Mutual Insurance

West Bend is using CARS on their current project to do a compilation of all testing information, taking the detailed level of 600 test cases and obtaining a high-level view from those results. With the CARS tools and processes, IT developers can easily see how many test cases are passing in a specific application deployment. If, for example, 80% are passing, developers can drill down to see how many high-risk cases are passing. This provides West Bend with critical insight into how long it takes applications to get up and running and how the level of risk affects success in deployment

West Bend currently has an average of over 150 projects that are active or pending throughout a calendar year, and expects that all new projects that commence will use the CARS processes and tools going forward. As Buechel notes: "I want to get all our projects on CARS."

Business Benefits

West Bend has already seen a number of business benefits from its new development framework and the use of the CARS solution. Among the highlights are:

- CARS provides live access to metrics, in terms of how projects are progressing, and enables developers and managers to make better-informed decisions about a specific application project.
- Since successful application deployment is the goal, the new development framework has enabled West Bend to improve upon its delivery schedules, and more importantly in the quality of the applications it is deploying.
- While many of the changes are difficult for the end user agents to notice, they are benefiting from the new development framework. Agents are giving West Bend positive comments on the Web applications they receive and the faster turnaround times to get them up and running. Internally, IT has greater confidence of an application when it is deployed.

- Better management of “scope creep.” By having a structure to communicate how changes requested by the end users will impact a schedule or require other components to slip, CARS processes will make a big difference in how the development group is able to manage scope.
- Globally, West Bend anticipates it will be able to manage resources better, ensuring that development work is standard across the company, which contributes to improved efficiencies and the building of a knowledge base for the organization. “It will provide more flexibility in shifting resources. With CARS we don’t have to limit their work to a given type of product or type of business since we’ve standardized the process and the roles,” says Buechel.
- One example of the types of specific benefits that West Bend has seen involves its Application Readiness reporting. The report, executed through CARS, shows a snapshot of the entire testing process. Normally, a staff member would spend over four hours preparing the report. Because of the time it took, West Bend was only running the report weekly per project. With CARS, data is taken from multiple places and provides multiple views, and is available at the push of a button now. This is a significant time savings and delivers business benefits because it enables IT to spend less time reporting and more time making important decisions from the results of the reports.

Lessons Learned

West Bend has learned several important lessons and best practices throughout this process of building a development framework. Among them are:

- First and foremost, recognize that change management is a significant undertaking. This is a dramatic change for employees, and companies need to determine how to best handle the change.
- Because the change is so incredible, West Bend recommends that organizations consider doing it on a smaller scale than West Bend did. Look at the weakest points in the current development structure, such as quality or cost. Find the factor that is really leading concerns and drill into this process incrementally.
- It is important to have your development process in place before you roll out any tools to assist IT staff, otherwise, you won’t be able to capture the strategic value of the tools.
- Roll out the new development framework incrementally, preferably into existing projects if you can. This allows the staff to familiarize themselves with the new framework in a more non-threatening way because they are already working on a given project. It is also a win because it exposes the developers to the benefits of the framework, and they can reach the realization that the new way does provide them with better information for doing their job. This validation is critical to success.

Upside Analysis

West Bend is an example of a company that really understands the strategic business implications of laying a strong development foundation. While many companies will not have the fortune of this viewpoint from their leaders, it is a strong case for strategic development frameworks. West Bend approached the entire process with forethought, and even though at times the actual process was grueling, the company now has a solid foundation for completing quality applications development. Using the integrated workbench from Compuware strengthens the benefits of the new development framework by providing automated reports and information gathering that would be impossible of too time-intensive for individuals to complete. Other companies that considering implementing testing and QA tools into their development processes can use the best practices that West Bend benefited from and that are outlined in this implementation study.

ABOUT UPSIDE RESEARCH

Upside Research is a research and consulting firm focused on helping clients put application development, Web services, business process management, integration, and enterprise infrastructure challenges in perspective. Upside Research helps organizations find practical ways to achieve their IT goals and profit from the diversity of a changing technology landscape.

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