

case study

RECOVER



KEY METRICS

- 27.4% of application from reusable components (by LOC)
- 64 Generic Components Used
- 8 Custom Components
- Total component percentage: 88.37%
- 2.87:1 ratio of test code to production code
- Personnel:
 - One TopCoder Project Manager
 - One TopCoder Architect,
 - Two On Point Architects
 - 38 different members involved in design review
 - 69 different members involved in development review
 - 123 members involved overall in design, development and review of components



The Customer

On Point Technology is the leading independent solution provider dedicated to addressing the challenges facing state unemployment insurance programs. With an exclusive focus on unemployment insurance, On Point Technology has the experience and intimate knowledge of the challenges facing unemployment insurance directors and their staff. On Point Technology provides configurable, Web-based applications for states so they can be assured of the accountability and integrity of their unemployment insurance programs.

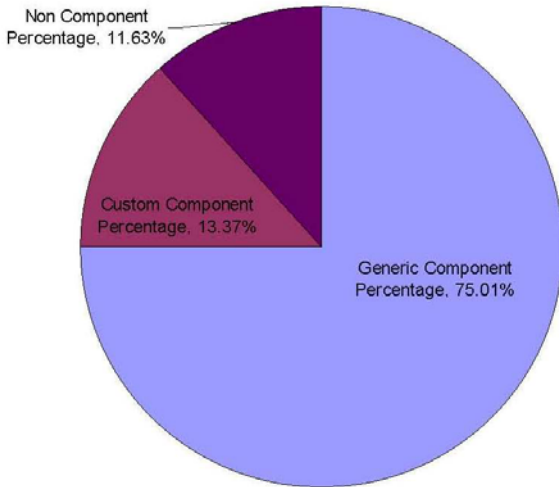
The Challenge

On Point Technology needed to build multiple products while avoiding the time and cost barriers associated with hiring and training additional staff. Beyond resource management and staff augmentation, the company also wanted to improve their overall design and development methodologies. TopCoder filled both of these voids with its comprehensive component-based development methodology (CBDM).

The Solution

Recover was the first solution built by On Point Technology exclusively through the TopCoder Direct model – a software factory platform approach to application development which allows high quality, pre-built and fully tested catalog components to be assembled quickly and cost effectively, while affording an exceptional degree of process transparency.

Component Re-Use



Most of the application code was generic (75.01%).

Recover is a process designed exclusively for unemployment insurance and uses sophisticated Web technology and business rules-based decision support processing. Recover improves overpayments collections by automating many components of the process, which allows staff resources to be used more efficiently and facilitates much higher recovery rates.

The Details

The On Point development group recognized the TopCoder component library would contain much of the generic processing code that the Recover application would require. Access to the component library would give them a significant head start on the Recover development project. On Point also knew that by utilizing the TopCoder member base they would gain access to a large development workforce which has great expertise. The total package of component library, expert member base, and access to high quality TopCoder architects was a powerful advantage in addressing delivery deadlines.

The TopCoder Direct model allowed access to the TopCoder staff and member base while allowing On Point's internal staff to focus on their own domain expertise. On Point championed the business specifications phase and achieved a passing score upon submission to TopCoder for review. An On Point architect was assigned to work along side the

TopCoder architect to execute the architecture, component production, and application assembly phases. Concurrently TopCoder was hired to create the automated testing scripts. On Point executed the QA phase and utilized TopCoder for fixes and modifications when necessary and worked with a TopCoder deployment architect to create deployment scripts. On Point then performed deployment and UAT testing at a client site.

The net result is platform enhancements delivered quickly and cost effectively which allow On Point Technology to provide state clients more effective collections functions and higher state trust fund balances.

The TopCoder Advantage

The TopCoder methodology uses competition to ensure the highest quality solution for each phase. At least two designers and developers compete, and a Review Board made up of three of the highest rated TopCoder members evaluate each submission on a number of key metrics. Each component is packaged separately to promote reuse within other areas. In addition, this lowers the impact of changes throughout the project. TopCoder Project Managers create developer forum threads and posts for rapid updates to required changes.

Compared to traditional IT consulting, the TopCoder component-based methodology and reuse solution resulted in a substantial savings over the cost of the total application, higher quality in design and development, and consistent deliverables that will save significant time and resources in future phases.

About TopCoder

TopCoder has over 160,000 members worldwide representing its virtual workforce. Through competition-based methodologies these members create commercial grade software components and assemble them into a wide variety of applications for numerous Fortune 500 and leading high tech companies. TopCoder maintains a library of over 1,200 generic components in Java and .NET that are leveraged to reduce cost and time, and increase quality in client applications.