

Case Study: SAP Consolidation, Business Process Optimization, and Test Acceleration

This case study highlights how one of the world's largest dairy companies turned to automated testing, leveraging Worksoft's unique business process discovery technology, to ensure end-to-end quality and efficiency across their enterprise.

Challenge

This company's core strategy for success was to cut costs and continuously improve operational efficiency. As they continued to add more lines of business and expand into new geographies, they were becoming less and less efficient. Each geography had developed their own way of doing things, and the company now had multiple versions of each of their business processes. Empirical evidence suggested that many of the processes being used within the geographies were less than ideal.

There was no objective way to measure and identify the best and worst processes across regions. Best practices were undocumented and management lacked visibility into basic processes, including branch location inventory, sales orders for distribution, and contract fulfillment. Further complicating the picture was that they had several instances of SAP running across their organization. With the growing system sprawl, IT was challenged to keep up with ongoing updates and changes to the system.

Manual testing was being used to validate changes in the enterprise. Each project was a "wave," and an agile iteration methodology promoted each wave. Testing was dependent on available documentation and was time-consuming and error-prone.

Opportunity

The company knew if they could determine the most optimal processes, consolidate to a single SAP system, and get everyone to use the optimized processes, they could dramatically transform operations. The plan was to identify, document, and prioritize business processes across six core regions as part of the consolidation effort. Consistent processes would bring best practices from each region across the enterprise, simplifying future change activity. This, combined with optimization of business processes, would enable accelerated testing and lower the risk of business disruption.

But first, they'd have to identify what the best processes were. Capturing these processes manually would be time-consuming and error-prone. How can the company possibly know their actual processes and the variations without interviewing all of the business users? It would take months to do so, and the information would be outdated and unreliable by that time. With the need to discover and document their "as-is" business processes – it was clear automation was required.

Solution

With both IT and business teams looking to achieve the same objective of process understanding, Worksoft Analyze was introduced as a technology to help both. Analyze automatically discovers business processes as users perform their normal daily activities. This eliminates the need for diagramming, interviews, or manual process modeling. It captures end-to-end processes including keystrokes and screenshots and creates a comprehensive, visual view of business process variations and practices.

Automated Discovery and Business Process Optimization Analysis

Worksoft Analyze's capture technology was leveraged by business users across the organization and it was as simple as starting and stopping the technology to automatically capture normal activity execution. Collecting business process information from the organization in parallel eliminated time-consuming interviews and manual process documentation creation – and meant the data was timely and accurate.

The organization then consolidated the business process intelligence from hundreds of users and analyzed them to see:

- Variations in processes
- Processes used the most and those used the least
- How much time each step in the process took

With this analysis, they identified best practice process paths for each geography – and ultimately, established best practices worldwide. This insight not only drove the systems consolidation effort, but there were a number of additional benefits.

Automated Documentation

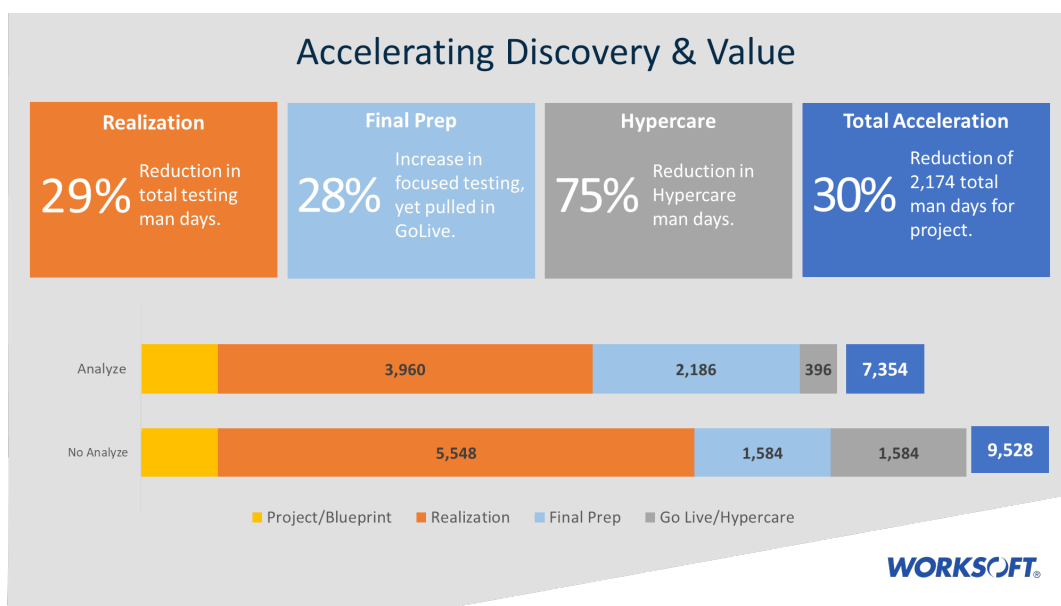
Worksoft Analyze's business process discovery also helped the company automatically generate step-by-step documentation and flowcharts. This was used to create consistent training materials for worldwide operations.

Test Acceleration

The same captured business processes also became assets for automated business process testing. Ensuring business processes were being executed as designed was dependent on the knowledge of actual business processes. Automatic discovery, documentation, and the resulting optimization greatly accelerated the creation of an end-to-end test library. Teams could quickly identify what should be tested, where the risks were, and how the processes should be tested – giving them a jump-start on building the necessary test automation.

Benefits

The value of automating the discovery of detailed business process knowledge to the business and test teams concurrently eliminated an expensive step in the project execution. Provision of accurate process information reduced the opportunity cost for process optimization decisions. Provision of this insight to the test teams reduced enterprise risk by ensuring applications were tested just as end users need them to. This helped ensure business operations continued to perform as expected after any changes.



The acceleration provided by Worksoft Analyze was roughly 30 percent per wave cycle. This advantage lowered the total amount of time required for each wave in requirements and development. This extra time allowed this international dairy company to fully complete release regression, decreasing hypercare after each release by a factor of five – while also reducing release risk. Overall defects in production were roughly cut in half over the two-year period, and the company was able to accelerate automated testing and provide more coverage than manual efforts.

With automation in place, a team of 100 business analysts could perform value-added activities instead of manual testing. Testing is more complete, with better coverage and improved outcomes for production outages and defects. The business identified the optimal business process and consolidated SAP instances across the enterprise. The combination of Worksoft Analyze for discovery and acceleration and Worksoft Certify for test automation provides a measured return of nearly \$600,000 per year, with savings growth expected each year as existing test coverage and automation continue to improve returns.

For more information, visit www.worksoft.com.