›› DOW IMPROVES SAP PERFORMANCE AND AVAILABILITY WITH MERCURY INTERACTIVE'S SOLUTIONS.

> The practice of Six Sigma goes hand in hand with taking a business-centric view of managing IT services. We use Mercury Interactive's Topaz for end-to-end service level measurement and management, and to support our Six Sigma methodology. As a result, IT and business units alike are aligned around the same, quality-centric goals."
>
> ART EBERHART, GLOBAL DIRECTOR, INFORMATION SYSTEMS, DOW CHEMICAL

INDUSTRY/MARKET

Chemical, plastics, and agricultural products and services.

CHALLENGE

Operational performance and service availability are two key challenges for Dow's Global IT Services (GIS) organization. They are also the basis of Dow's service level management (SLM) goals to help ensure that systems are up and running to meet business demands.

SOLUTION

Dow never applies technology for technology's sake — the company applies technology to create value. Dow uses Mercury Interactive's application delivery and management solutions to help IT meet the company's business goals — by testing smarter, deploying with greater success, and managing IT service levels, availability, and performance according to the requirements of Six Sigma-based quality principles.

The Dow Chemical Company is a leading science and technology company that provides innovative chemical, plastic, and agricultural products and services to many essential consumer markets. With annual sales of $28 billion, Dow serves customers in more than 170 countries and a wide range of markets that are vital to human progress, including food, transportation, health and medicine, personal and home care, and building and construction, among others.

In the past five years, Dow's Global IT Services (GIS) organization has elevated its position and status from a cost center to a vital business asset providing strategic services for the company. This is due in large part to Dow's focus on using technology to create value and the company's pioneering efforts in the area of Six Sigma, a business centric quality initiative that provides metrics for ensuring business processes — everything from manufacturing to billing — run as smoothly, efficiently, and error-free as possible.

According to Art Eberhart, global director of Information Systems, "Dow uses IT to generate value in three ways: connecting with customers better and faster, increasing productivity, and improving decision making. We were one of the first IT organizations to adopt the Six Sigma quality methodology to help us drive value internally as well as with customers and suppliers. In doing so, we created a standardized, customer-centric discipline and a common language with which to communicate across our company."

OPTANE DELIVERS A QUALITY-CENTRIC SOLUTION FOR MANAGING IT SERVICE LEVELS

"Mercury Interactive's Optane™ Suite support our Security-Level Management (SLM) goals and also allow us to provide Six Sigma reporting capabilities to our end users and service partners," says Eberhart. "They also enable us to take a business technology optimization (BTO) approach to the way we measure, manage, and maximize our IT services across the application delivery and management lifecycle stages and, at the same time, reduce our total cost of ownership."

TESTING APPLICATIONS FOR READINESS PRIOR TO DEPLOYMENT

Dow's GIS has been using LoadRunner and WinRunner to test its systems under load and stress conditions as well as to automate its functional testing process. According to Rich Guidotti, process lead for availability management at Dow, "LoadRunner has become our standard tool for testing applications before they're rolled out to a customer or third-party partner. Mercury Interactive's application delivery solutions give us the ability to know in advance that our applications are ready to meet the service levels we've established with our end users. It also allows us to ensure quality improves with each subsequent release of our applications."

PROACTIVE MANAGEMENT OF APPLICATIONS FOR SERVICE-LEVEL COMPLIANCE

Dow is also using Mercury Interactive's Topaz for SLM to create "Scorecards" that are routinely published internally and to its service partners. GIS has also created an executive dashboard

HIGHLIGHTS

- Dow uses LoadRunner and WinRunner for load and automated functional/stress testing.

- Topaz for SLM provides Dow a business-centric approach to manage and optimize performance and availability for global IT service, provides early warnings of availability and performance problems, and ultimately ensures Dow's ability to meet critical service-level objectives.

- Topaz SiteScope provides a complete, integrated systems view of performance metrics across Dow's IT infrastructure.

- Topaz enables Dow to quantify its mean time to repair, or mean time between system failures — and leverage improvements made to one system to increase the quality and Six Sigma compliance of other systems.

BENEFITS

- Once at 3.5 Sigma with respect to SAP performance and availability. Topaz for SLM has helped improve the quality of Dow's SAP systems to well over 5 Sigma in that same area.

- SAP availability improved from 10,500 minutes of prime time unplanned outages in 1995 to the current level of 33 minutes primetime unplanned outages at the end of the first quarter of 2003.

- This improvement in the availability of Dow's business-critical SAP systems translates into a $38.9 million dollar productivity gain over seven years.

- Most importantly, Dow is able to provide customers with quality service and system availability when they need it.

view for many of those services to see whether or not they are meeting the expectations of its customers.

According to Eberhart, "Topaz allows us to look at service availability and end-user performance metrics from our customers' perspective. It also enables us to take an end-to-end approach to measuring more than 40 deployed IT services. As a result, Topaz enables us to see in real-time whether or not customers are successfully accessing and using our systems to fulfill their needs and accomplish their goals."

TOPAZ SUPPORTS SIX SIGMA REPORTING REQUIREMENTS

"Using Topaz, we're able to generate reports that use Six Sigma terminology and support our SLM objectives, says Guidotti. "This way, both IT and our business units are able to get answers to the same, quality-centric questions. 'Am I in Six Sigma compliance? What defects/variations exist in my IT systems? What steps are we taking to reduce those defects or variations?"

IMPROVED SAP PERFORMANCE AND AVAILABILITY

According to Guidotti, "We're a very large SAP R2 solutions shop. When we started our Six Sigma improvements and activities back in 1999, we were probably around 3 or 3.5 Sigma with respect to SAP performance and availability. Today, using Topaz for SLM to measure and manage the quality of our SAP systems, we're well over 5 Sigma in that same area. We've also been able to quantify the mean time to repair or the mean time between system failures, between

our SAP system and other systems. This allows us to leverage the improvements we've made with our SAP system in order to increase the quality and Six Sigma compliance of other systems we have implemented around the world. We're also seeing an improvement in test cycle times on the order of five to six times."

THE BOTTOM LINE

Eberhart concludes, "With Mercury Interactive's Optane solutions, we're able to apply the principles of BTO to deliver more value to our customers — by testing smarter, deploying with greater success, and managing IT service levels, availability, and performance according to critical Six Sigma requirements. Plus, we can reuse existing technology and metrics without having to duplicate our effort, and share those assets across the application lifecycle for even more quality control and improvements."

The results? The company's SAP availability improved from 10,500 minutes of prime time unplanned outages in 1995 to 125 minutes of primetime unplanned outages in 2001. Improvements continue to be made, bringing the current level of primetime unplanned outages to just 33 minutes at the end of the first quarter of 2003. This improvement in the availability of Dow's business-critical SAP systems translates into a $38.9 million dollar productivity gain over seven years. And most importantly, Dow is able to provide customers with quality service and system availability when they need it.