



The Computerworld Honors Program

Honoring those who use Information Technology to benefit society

Final Copy of Case Study

Year:

2013

Status:

Laureate

Organization Name:

San Jose Water Company

Organization URL:

www.sjwater.com

Project Name:

Project CCB

Please select the category in which you are submitting your entry.

Collaboration

Please provide an overview of the nominated project. Describe the problem it was intended to solve, the technology or approach used, how it was innovative and any technical or other challenges that had to be overcome for successful implementation and adoption. (In 300 words or less.)

Project CCB is a project to transform and integrate San Jose Water Company's (SJWC) customer information and field operations to enhance service levels for the approximately one million people that rely on the company 24/7 for high-quality drinking water. SJWC's 19 person IT team performed as much of the work as possible, learning transformative new skills and delivering the project for half the costs of peer implementations (\$5.7 million vs. \$13.8 million). Project CCB fully integrates and provides real-time scheduling efficiencies to virtually every aspect of customer service, including rates and billing, establishing new connections, meter reading, revenue accounting, payments, field service, maintenance and meter management. Project CCB capitalized on the "first use"

of a prepackaged Service Oriented Architecture (SOA) technology in our industry, so employees instantly see information from other systems. Mobile field employees are empowered with computers and software connected to SJWC's network to improve productivity, decrease travel and, where necessary, provide exact to the minute appointments to customers driven by a SOA integrated continuous real-time scheduler. Call center employees see the exact status of work in the field – the time the system dispatched the work, when the employee is in route, and arrival time at the customer site, enabling instant response to customer questions about field technician status. All employees are empowered with full water system information, enabling decision-making by staff performing the work. If it is necessary to contact an engineer or supervisor, all staff can see the same information simultaneously from any location, including repair trucks, eliminating costly travel and delays. This is implemented through easy-to-use web mashups created by SJWC staff. SJWC's IT is as easy to use as Google.

When was this project implemented or last updated? (Please specify month and year.) Has it incorporated new technologies and/or other innovations since its initial deployment? (In 300 words or less.)

Original implementation date was June 1, 2011. Additional innovations and date of innovation: * Increased customers receiving rate assistance 200%, and created a secure, periodic (every 6 months) data-sharing program to ensure maximum and accurate participation in customer rate assistance programs. Using Project CCB tools, data, and Java, we created a new application to securely share Low Income Rate Assistance data with Pacific Gas and Electric Company, increasing the number of customers qualified for water rate assistance from approximately 8,000 customers to 24,000 customers (December 2012). * Enabled scheduled or rapid notification of customers impacted by any water system maintenance or concern. We integrated Project CCB customer data with a new, easy-to-use pipe network and map application any employee can use to quickly solve for the right control valves to isolate the problem, solve for impacted customers, and, provide contact information for use in personal, email, text or telephone notification (October 2012). * Created easy-to-use web app, enabling all authorized staff (and potentially customers) access to customer and fieldwork data, mashed up with Google Street View, enabling all employees to gain insight into customer relationships and field activities to provide better information and service to customers. No specialized knowledge is required to use "Marmot" – it works like any web search engine (December 2011).

Is implementation of the project complete? If no, please describe the project's phases and which phase the project is now in. (In 300 words or less.)

While original Project CCB objectives are complete, Project CCB enabled continuous change and growth (examples of additional benefits after project completion are in 6., above): * Project CCB created new, growing skills for SJWC employees in new technologies, such as SOA, and implemented a technology architecture that will be continuously improved by SJWC's partner Oracle and SJWC. Future improvements include more web- and mobile-based services to customers beyond finance services (billing and payment), and potential integration of any service to benefit the customers, employees or the business. With these new skills and technologies, development time for new capabilities is slashed compared to legacy systems – the new Low Income Rate Assistance system was initially developed in 3 weeks rather than 4 months. * Since all information about status of repairs, vehicle location, field activity, and, where appropriate, customer information is available instantly in applications or web sites – this increases the level of engagement and transparency for employees and customers. Increased engagement drives more ideas from customers and employees, so the benefits of Project CCB continue to increase.

Please provide at least one example of how the technology project has benefited a specific individual or organization. Feel free to include personal quotes from individuals who have directly benefited from the work. (In 300 words or less.)

* "You guys saved the customers more than \$7 million dollars. The reason people are so excited is because it doesn't seem this is what usually happens," Vardy Shtein, customer. * Immediately after implementing Project CCB, SJWC's customer call abandon rate (customers who hang up due to long wait times) decreased from 4% to 2%. * SJWC's time to respond to customer emergencies decreased from 30 minutes to 24 minutes. * Customer satisfaction increased, since status of any work by any part of the water utility is available to all employees and customers immediately; there is never a need for a call transfer or return call. * "Instead of sorting work and working to determine the status of work, we can help the employees. And we get to go home before 7 or 8 o'clock at night, more like everybody else," Paula Guevara, Superintendent, Customer Field Service, SJWC.



Would this project be considered an innovation, a best practice or other notable advancement that could be adopted by or tailored for other organizations and uses? If yes, please describe that here. (In 300 words or less.)

Yes. Project CCB is recognized for its innovation in integrating customer service data, automated appointments and dispatch, and financial data across over 25 products and web mashups and the impact this has on enabling "right now" answers to customers, significant cost savings, efficiencies and teamwork. Examples: * Project CCB received an Expanding Excellence award for "Best Customer System Implementation, under \$400 Million in Revenue" from CSWeek, an internationally known nonprofit dedicated to advancing customer service in utilities. The award and project were presented during CSWeek to over 1,000 attendees, and summarized in a video presentation:

<http://www.youtube.com/watch?v=3G3iUWXA-gs&feature=youtu.be> * SJWC's Manager, Customer Systems, Tricia Zacharisen, is a founder of the Oracle Customer Care and Billing international user group. She was extended the opportunity for this role because of her interest in sharing information to make utilities better, and for her expertise and leadership. * Results for Project CCB were used by SJWC's COO to nominate SJWC's Vice President, Information Systems for a Bay Area CIO of the Year Award:

<http://www.bizjournals.com/sanjose/print-edition/2012/06/15/drysdale-helps-lower-water-rates.html>. This webpage cites many examples of results and best practice recognition, including a cost to implement Project CCB of \$7 million less than industry standards, money customers won't have to pay. Since 2010, colleagues from Africa, Philippines, Australia, Europe and many American cities have visited SJWC, met, or connected to discuss challenges, approaches, benefits, and lessons learned. Additionally, Project CCB, Mobile Computing, Geographic Web Mashups and using integrated information to empower service to others were presented in an additional session during CSWeek, presentations during Oracle OpenWorld 2012, and in the Keynote for FullCircle 2012, the user group for Oracle Work and Asset Management.

If there are any other details that the judges should know about this project, please note them here. (In 300 words or less.)

For photos available, please see the photos in the 2-minute video referenced above: <http://www.youtube.com/watch?v=3G3iUWXA-gs&feature=youtu.be>.