



American Electric Power consolidates processes and speeds problem-solving with an eye toward cost savings

American Electric Power is focused on building a smarter energy infrastructure and delivering new technologies and custom energy solutions to customers. AEP operates and maintains the nation's largest electricity transmission system.



Customer:

American Electric Power (AEP)

Industry:

Energy & Utilities

Organization Size:

Enterprise (10,000+ employees)

Region:

North America

Website:

aep.com

AEP's Damage to Outside Property (DOP) solution helps field personnel capture information when company facilities are damaged by non-AEP personnel, such as a car striking a utility pole. The solution's proof of concept resulted in \$40,000 gain in two districts over two months. Across all of AEP's districts, that would equate to \$4.8 million in potential savings per year.

Investor-owned utility American Electric Power (AEP) has the largest transmission grid in North America and provides electricity to 5.5 million customers in 11 states. In addition to meeting customers' power demands efficiently and affordably, AEP must meet a variety of state and federal regulations – and always put safety first for both customers and employees. Smartsheet enables AEP to create innovative solutions to a variety of problems, enabling rapid testing and deployment that demonstrates results more quickly than traditional IT development processes.

Smartsheet has increased the speed at which information can be shared, because users can pull current information anytime instead of waiting for a manual report to be issued. The ability to get data to where it's needed, on demand, just in time, helps AEP make better business decisions.

Situation:

AEP's business unit planning organization focuses on how the company can use technology to help drive operational efficiency, reduce costs and meet customers' increased expectations for fast response.

One challenge with making progress on great ideas that can help customers or employees is that a completed project can take 12 to 24 months to deploy. During that time, teams are likely to revert back to the way they've always done things, which is an obstacle for a group that's being asked to pursue innovation.

To meet the utility's obligations to keep customer costs low while demonstrating the value of its decisions, AEP knew a low-code or no-code platform would be a crucial part of the toolkit.

Solution:

Smartsheet enables AEP to test and refine solutions, with pilots that show real impact to the bottom line. Those solutions can then be built out through the IT development process or, in many cases, implemented immediately with Smartsheet.

Today AEP uses Smartsheet to more effectively capture data from field teams, improve oversight of safety and operations, boost visibility of programs and initiatives for team members and leadership,

Business Situation:

AEP wanted a platform to support its initiative for faster development and execution of innovative solutions for safer, more effective power generation and customer service.

Solution:

AEP uses Smartsheet to rapidly develop and iterate business solutions, improve communication for field technicians and generating plant staff, and save millions of dollars in property damage and work execution.

Now dashboards enable the teams to track and reprioritize work so tasks can be grouped more efficiently and nothing is overlooked.

and improve accountability across a range of departments. Smartsheet products including Control Center, DataMesh, and WorkApps provide consistent templates, better information flow, and more personalized work management.

Benefits

American Electric Power (AEP) uses Smartsheet as a flexible platform to quickly create, test and iterate solutions for a variety of business problems that have the potential to save millions of dollars per year.

A better way to recover damages to property:

One important solution for AEP is related to Damage to Outside Property (DOP). When a traffic accident results in damage to a utility pole, AEP works with its insurers to recover the costs of repair or replacement. Documenting the damage and establishing fault used to start with a paper form, “the blue sheet,” but it wasn’t always clear who on a field team was responsible for getting information from emergency responders or managing the process.

Now a Smartsheet form is used to collect facts as well as photos and videos, with metadata showing the time and location to ensure an accurate understanding of the accident scene. The DOP solution has significantly reduced claim denials, enabling AEP to recover more repair costs. A pilot of the solution in two districts saved \$40,000 over two months, or an average of \$10,000 per month per district. Expanding it to all of AEP’s districts could save the utility \$4.8 million a year.

Prioritizing work without losing track of the small things:

In addition to repair and construction programs mandated by each state’s utility regulators, AEP’s construction engineering teams fulfill customer repair and service requests. Both of those kinds of projects are lower priority than resolving unexpected power outages, but before Smartsheet it was difficult to maintain visibility for the still important non-emergency tasks. Now dashboards enable the teams to track and

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Millions of dollars in potential cost savings with mobile solution for documenting and claiming property damages against insurance.

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The impact becomes clear in the case of AEP Ohio, which serves 1.5 million customers. The organization replaces poles and other equipment, turns on power for new customers, and works to keep it on for existing customers. That requires hundreds of millions in capital budget per year and thousands of employees. At that scale, organizing the work of the crews to be more efficient can make a significant difference.

Improving safety and productivity in the field:

Field teams have implemented several Smartsheet solutions that fill gaps in their schedules when they're far from business offices. Mobile solutions help repair teams find nearby service requests without having to drive miles to a service center, then turn around and return to the customer. It's also easier to track safety incidents by filling out a mobile form and attaching photos to the record; instead of being filed in a drawer, the data feeds into a sheet that can be analyzed to identify patterns that may require equipment upgrades, retraining, or new awareness campaigns.

AEP also is using WorkApps by Smartsheet to create individual workspaces for staff at generating plants, enabling them to more easily capture data from equipment spread over a sizable territory. Within a plant, people move among locations, up 13 stories or a mile in any direction, and don't always have connectivity and communication capability. As they check instrumentation and do measurements, they can use Smartsheet on a mobile device to capture the data directly instead of recording it on paper, then going back to a workstation to enter it into the system. That means colleagues don't need to wait until the end of the day or the next day to get updated readings.

Tailoring work and reporting to meet people's needs: Dashboards allow leaders to see real-time status of a variety of projects and issues, instead of waiting for reports to be filed and phone calls to be returned. Increased speed to decision-making is one of the biggest benefits of using Smartsheet. Dashboards allow leaders to see real-time status

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Faster creation, development, and iteration of proofs of concept and solutions without adding to IT team workloads.

of a variety of projects and issues, instead of waiting for reports to be filed and phone calls to be returned. AEP's ability to have fresher data enables them to change course earlier when necessary, which has had real impact across the business.

AEP's marketing teams are using Smartsheet to improve consumer education. Dashboards provide a central place to review and edit content as well as plan and track communication across various channels, including print, email, and social media. Marketing teams can work more smoothly with external vendors to ensure the right messages go out to the right audiences, without version issues or duplicate effort.

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Making data capture and access more efficient enables line and engineering personnel to focus on their areas of expertise, without spending time on data entry. Tools that keep field personnel's minds on their tasks help protect their safety.

A platform to energize collaboration in the industry: The utility industry is not competitive by nature. Through industry consortiums like the Electric Power Research Institute (EPRI) and the Edison Electric Institute (EEI), utilities regularly share best practices and resources for improving efficiency, customer service, and safety with other investor-owned utilities such as Florida Power & Light, Southern Company, or Con Edison. The Smartsheet platform makes it easier for AEP to foster collaboration among industry peers.



Improved communication and work management for field crews to enable efficient customer response with less travel time.



Real-time data visibility for better insights and faster decision-making.