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Summary

Customer: Pepco's Atlantic City Electric, tracking field safety inspections and managing compliance for their power grid in New Jersey.

Challenge: Managing large quantities of field safety inspection paperwork is time and resource consuming.

Solution: Capturx Form Software for digital pens automatically digitizes handwritten data on paper forms and integrates the data into back-end systems, like their Oracle Database.

Results: Now they can efficiently automate data entry and compliance tracking for their field safety paperwork, so they can focus on providing safe and reliable electric service.

Atlantic City Electric Automates Field Safety Inspection Reporting

As part of Pepco Holdings – one of the largest energy delivery companies in the Mid-Atlantic region – Atlantic City Electric provides safe and reliable electric service to 547,000 customers in southern New Jersey. Tracking field safety inspections and process compliance on highly regulated and potentially hazardous assets is key to keeping all stakeholders safe, service operating reliably, and meeting regulatory requirements. Documenting field safety requires a great deal of paperwork, which includes extra costs for scanning, extra data entry, and risk of data loss as paper gets misplaced. To streamline safety paperwork and document processes for compliance, Atlantic City Electric chose Capturx Forms Software.

Challenge: Managing Field Safety Inspection Paperwork

Atlantic City Electric deploys large field teams to service infrastructure, field assets, and customers across Southern New Jersey. When crews are working in the field, Atlantic City Electric adheres to a range of industry best practices to ensure the safety of their teams, the community, the infrastructure, and the environment. The process starts with proper job planning and an emphasis on cardinal safety rules for electric utility work – while also covering equipment use, work area protection, and environmental compliance.

To track compliance with field safety procedures, Atlantic City Electric has teams of inspectors which go to work sites to observe and report on adherence to safety processes. These range from ad hoc field safety inspections to extended job observations. Detailed data on safety inspections are captured on paper forms, which are later returned to operations for analysis and reporting. The aggregated data helps Atlantic City Electric get better field safety operations visibility to identify, resolve, and prevent issues – keeping all their stakeholders safe while ensuring compliance with standard operating procedures and regulatory requirements.

While access to the aggregated data enables nimble response, processing the data can be cumbersome. Writing on the paper forms is natural and easy – especially given the highly mobile nature of the inspections and variable environments. But processing the data – data entry and scanning – is time and resource consuming. If paperwork gets misplaced or left in a truck, there's also risk from issues going unresolved or missing documentation.

Atlantic City Electric explored data collection with laptops and PDAs, but the devices were cumbersome in the field due to weight, limited battery, and difficult operations in wet weather and bright sunlight, for example.

Solution: Capturx Forms Software and Digital Pens

To automate data capture for safety inspections, Atlantic City Electric chose Capturx Forms Software, which enables inspectors to instantly digitize data on paper forms using ordinary paper with digital pens. With Capturx, field safety inspectors print and use the same inspection checklist form that they've been using for years, printed on normal paper using the office printer. The forms are printed from Excel using the Capturx add-in, which creates a unique digital watermark enabling the form to be read by the digital pen. As the inspector later collects data to document safety procedures in the field, the digital pen creates a normal ink record on the paper while also making a digital copy which it stores on the pen's memory. Each stroke of the pen on the paper form creates new digitized data.

Capturx provides access to the original handwriting while also converting words and numbers into digital text, making it easy to analyze, search, and retrieve data and documents. The structured data tables can be automatically integrated into Microsoft Office, databases, and other back-end systems to automate workflows without scanning or manual data entry. Atlantic City Electric integrates the structured data into their Oracle database, where it's available for analysis and reporting based on work tasks, regions, issues, and a range of safety categories.

"The Atlantic City Electric subsidiary of Pepco Holdings operates a large distributed power network, managed by teams of engineers and service crews, who generate a great deal of paperwork," said Steve Brown, Manager of Safety Services. "Capturx helps us efficiently automate the paperwork so we can focus on providing safe and reliable electric service to our 547,000 customers."

Results

Streamlines Paperwork Processing

Capturx enables data sending through smart phones directly from the Bluetooth-enabled digital pens to the back office or by docking the digital pen to their computer via USB, which is the method that Atlantic City Electric uses. Key stake holders no longer have to wait for the inspectors to manually enter data into their PCs. Capturx not only reduces the time and expense of processing paper-based data, but it also frees up inspectors to stay in the field longer and complete more safety inspections than before.

Improves Compliance - Identify and Resolve Field Safety Issues Faster

Central teams get visibility into safety conditions sooner, allowing issues to be identified and resolved earlier than before. Faster data access and eliminating data entry reduces the risk of unaddressed safety problems caused by delayed issue reporting or data entry errors. To help with compliance, Capturx contains the original handwriting, signatures, converted data as keywords, and author, date and time stamps.

Works the Way They Work

With Capturx, Atlantic City Electric can automate their safety inspections without changing their simple and reliable paper-based process. Unlike mobile computers, software for digital pens does not require complex training, support, or suffer from limited use in harsh environments. Paper can be used in any environment – indoors, outdoors, rain, or direct sunlight. The pen is durable, easy to carry, and the data upload can be performed by nearly anyone.

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STEVE BROWN
Manager of Safety Services
Atlantic City Electric