

Capturx Automates Energy Audits



Summary

Customer: Leading Energy Management firms, conducting energy audits to help customers improve energy efficiency.

Challenge: Manual data-entry for energy assessment, can take up to 25% of an auditor's time. Huge demand for improved efficiency is creating process bottlenecks.

Solution: Excel-based forms solution for digital pens automatically digitizes handwritten audit data on paper forms and integrates it into Excel for processing.

Results: Auditors eliminated data entry and delivered energy reviews faster. Instead of spending time on data entry, they now can do more audits.

Leading Energy Management firms have deployed Capturx to improve the speed and accuracy of the energy audits that they conduct to help facilities managers and owners dramatically reduce energy consumption in buildings and campuses across the United States. New energy optimization projects usually begin with thorough energy reviews for existing facilities, including inspections of current facilities and evaluation of energy consumption. A large amount of data is collected, analyzed, and an energy plan is created which can reduce energy consumption by as much as 33% annually. Processing the data, however, can consume as much as 25% of an energy auditor's time.

Given the huge demand for improved energy efficiency and a finite number of certified professional auditors, energy management firms are looking for ways to streamline the collection and processing of audit data. Energy Management firms are using Capturx Forms solutions to eliminate data entry, deliver timely and accurate estimates, and spend more time serving more customers.

Situation: Facilities operators and owners lose a great deal of money to energy inefficiencies ranging from unnecessary lights to inefficient HVAC and office equipment utilization. Energy Management firms provide the expertise and analytical tools that help facilities managers implement energy efficient strategies based on their own energy usage patterns and goals. Project managers start with complete walk-throughs and comprehensive engineering studies of buildings to identify all opportunities for savings. As part of the process, project teams fill out paper forms as they walk the facilities, documenting the current conditions for each building. A variety of forms are used to make initial estimates and to track ultimate work progress. The forms often originate as Excel files. Data is written by hand on printed copies, and then entered into Excel for analysis, estimates, and project tracking. The more quickly data is collected, analyzed, and tracked, the faster the quotes, approval, planning, and execution.

Challenge: Energy Management firms often face project bottlenecks when their certified energy auditors are stuck doing data entry rather than working with customers in their facilities to understand their unique situations or analyzing audit results. Excel is often used to crunch data, and auditors can often spend up to 25% of their time doing manual data-entry of data collected on paper into Excel. Accurate data collection is important to both create accurate work estimates and to create the project plans themselves.

Audit teams would prefer to automate the data collection and free that administrative time to serve more customers. Many firms have explored mobile computers, but run into issues with the highly mobile and sporadic nature of data collection and note taking in every part of buildings. Weight, battery life, and durability also created issues with mobile computers. Pen and paper have remained the easiest way to collect the initial data in the facilities themselves, but the challenge of data entry and processing remained.

Solution: Capturx Forms for Excel

To automate and speed up data collection for energy inspections, leading Energy Management firms have selected Capturx solutions. Capturx enables teams to easily collect information on paper forms using digital pens, which instantly scan the information and integrate the handwriting and converted values directly into Microsoft Excel.

The basic data collection process remains the same – pen and paper – so energy audit and project teams can use their existing forms with minimal disruption to customers' operations or their own processes. Capturx works with forms printed on ordinary paper and digital pens. As the digital pen writes in ink – it also scans and stores the information on each form. The project teams continue their normal process – but are actually collecting digital data on the spot without fussing with, waiting for, or lugging around mobile computers.

When they return to the office, they simply connect their digital pens to their PCs and get immediate access to the collected data in Excel. The team can access both scans of the original handwriting and the handwriting converted to text in Microsoft Office.

Benefits

Project teams can cut audit times by 25% and perform more audits

Teams no longer have to spend up to 25% of their audit time transcribing all their forms. By eliminating this administrative work, they can more efficiently deploy resources, perform more inspections and provide more bids per day which means more business.

Faster quotes and project execution

The immediate data access also means that auditors can turnaround analysis and quotes faster – so customers can more quickly see the energy savings. With immediate access to audits and project data, teams get the immediate visibility to keep projects on track.

Works the way they work

Capturx dramatically streamlined the data capture and management process without requiring any radical changes to hands-on auditing process in facilities. Auditors simply continue to use tried-and-true pen and paper. The digital pen is durable and easy to carry. The data upload can be performed by nearly anyone. Once the pen is docked to the computer, the data is instantly available for editing or uploading to other central systems where it can be shared across multiple departments.

Unlike mobile computers, Capturx requires little training, support, or learning of complex new software. Capturx also adds the benefit of creating hard copy backups of all data that is collected. If the digital pen is ever lost, it can be inexpensively replaced while any recently collected remains intact on the paper.

Capturx has helped project teams deliver high energy savings to customers in a timely and accurate manner. Customers simply get faster service and can begin enjoying their energy savings sooner.

Inspectors
spend up to
**25% more time
in the field
versus data
entry.**