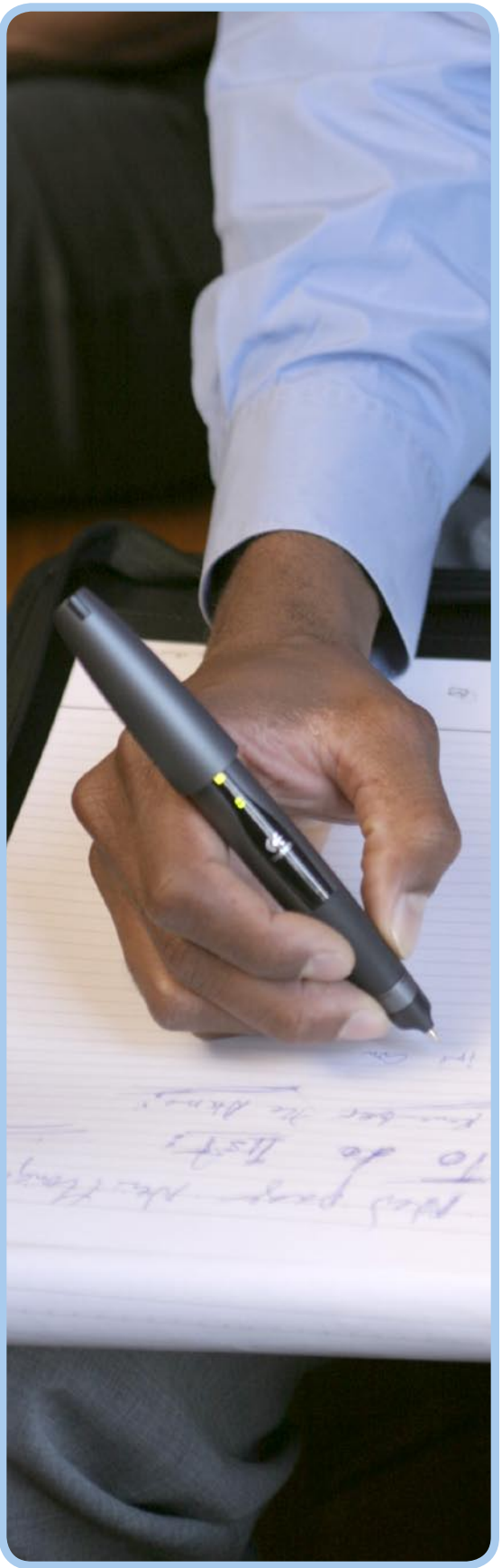
Government Agency Captures Enhanced Productivity, Better ROI With Digital Writing System

Time Spent on Repetitive Paperwork Dramatically Reduced



With 2,033 units of Federal and New York State-assisted low-income public housing to administer, the Albany Housing Authority (AHA) is the largest landlord in the city of Albany.

Established by New York State legislation in 1948, the AHA has grown to represent nearly 4 percent of the total full-time population of the city, providing homes for more than 3,700 people. The AHA also administers over 1,700 vouchers under the low-income Section 8 Housing Choice Program.

The AHA carries out thousands of inspections each year. But with a team of three inspectors covering this number of properties, paperwork has traditionally been a time-consuming process, involving duplicated data-entry, faxing, scanning and copying.

Enter the Logitech io2 Digital Writing System—a mobile data capture technology, with digital pen, docking station and a customized software solution from Write2Data, that radically reduces the amount of time inspectors have to spend on repetitive paperwork and forms.

AHA inspectors now fill out their inspection forms using a digital pen. When complete, they dock the pen in a USB cradle and an image of the form appears onscreen, which can then be validated, saved and routed electronically.

Data from completed forms is sent to a secure site for data cleanup using handwriting recognition software. Data is then extracted in an XML or .txt format from secure online storage, merged with the image file and returned for use in the AHA's back-end information system.

A 60-day pilot of the technology, successfully completed last August, has seen the AHA adopt the technology on a permanent basis. Offering enhanced productivity, better return on investment (ROI) and reduced total cost of ownership (TCO), it's easy to see why.

Paperwork, Paperwork, Paperwork

"Before this technology came along, we filled out three-part sheets by hand and there was a lot of faxing and copying. Each day, one member of staff had to come back to the office and pull the sheets apart. One goes to a tenant folder, one would go to another department and one would stay in our records," says Rita Cargill, risk manager at AHA and the person responsible for all of the AHA's Section 8 inspections.

"If a property failed a second inspection, we would have to physically get on a computer, do a letter and send the letter down to the residents to tell them that their apartment failed. It was a lot of work," says Cargill.

That process has been entirely automated. Data can be e-mailed instantly when the pen is cradled. Once inspectors have validated the paperwork, it automatically goes to a back-end system from where it can be e-mailed directly to apartment managers.

"I'm impressed with the technology," says Cargill. "Before, we had to manually type everything into a computer and it slowed the process. Now, instead of tying up a person with paperwork for three to four hours, they only have to work on it for fifteen minutes. It's saving us a lot of money because now we have the option of using that inspector in other fields."

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Customized Solution

Joe Mangano, senior field account executive at CDW•G, worked directly with Write2Data (the Digital Pen division of PortNexus Corporation) and the AHA to customize this cutting-edge mobile data capture solution.

"When the AHA indicated that this technology might be a good fit, I hooked up with my partners at Write2Data, who built a customized software solution just for them," says Mangano.

Mangano then passed the AHA's inspection form to Write2Data. They created a digital version to be used with the Logitech system. Throughout, the integrity and usability of existing AHA forms was maintained.

"From the user perspective, the AHA inspectors are doing the same thing they've done every day, with a clipboard, piece of paper and a pen. The user interface is a piece of paper—that's your computer screen. The beauty of this technology is that it automates the ink and makes the paper smarter, and it lets users use their most comfortable and traditional means," says Carl Restivo, vice president, sales, Write2Data.

Mangano asked the AHA if they would be interested in a pilot program at no cost, to which they readily agreed. The pilot ran for 60 days, ending successfully last August.

"During that time we were able to make some adjustments, change the form a little bit, and at the end of the pilot the customer was in agreement to move forward to the production stage," Mangano explains.

Changes included adding more checkboxes to eliminate the need to convert elements of the form from handwriting to digital text.

The system was also customized to enable automated e-mail workflow. To do this, Write2Data associated the AHA's table of existing e-mail addresses with a code on the paper form, providing AHA inspectors with active e-mail routing.

Write2Data built a customized software application that ensures that all the business rules associated with the form operate behind the scenes. Form data goes to the AHA's back-end system, along with an electronic image of the form. Signature capture as well as a date and time stamp are created when the pen touches the paper, thereby solving the "chain of custody" scenario that ranks high on the list of public sector organizational concerns.

"We've automated the entire process. Upon docking the pen, the data is validated—in other words, the handwriting recognition is converted to text and the inspector cleans up the data. That kicks off an automated e-mail workflow for three specific supervisors that all get an image of the document showing the reason for a failed inspection," explains Restivo.

Not only has faxing, copying and scanning been eliminated, but an electronic copy of the form has been created that can be used in a document management solution. The technology also allows inspectors to print these forms at their own desktop, enabling print-on-demand capabilities.

Reducing Costs, Improving ROI and TCO

Any organization like the AHA, with a form-intensive environment that wants to get data from mobile workers to a back-end system without going through the expense of hiring a significant number of data-entry clerks, can benefit financially from this cutting-edge data capture method.

The system eliminates such tasks as faxing, mailing, copying, scanning and data entry, bringing instant cost savings while increasing productivity and reducing TCO.

The system works on an application service provider (ASP) model, so there's no software infrastructure requiring capital expenditure—ensuring a low cost of entry for organizations looking to get into this kind of technology.

"Payroll is our most expensive item in terms of our costs of doing business. It was a duplicative situation to have inspectors manually write down on forms what the results of inspections were, only to have somebody rekey the information back into the PC. This system was an affordable technology that captured the same process of being able to automate this form at a very affordable level," says Peter Ragsdale, IT director, AHA, who describes the cost benefits as a "no-brainer."

As a standalone business process automation tool, the Logitech Digital Writing System may also eliminate the need for notebook and Tablet PC solutions.

Satisfied Customer

"We're happy with the technology on a variety of levels," says Ragsdale. "We were able to keep our process intact and remove the data-entry step, making the staff more productive, and certainly eliminating errors. Plus, the ability to disseminate the results of the inspection automatically via e-mail is great."

Thanks to the Logitech Digital Writing Solution, and a little help from CDW•G and Write2Data, the paperwork of AHA inspectors has suddenly become less time-consuming, less expensive to complete and easier to perform—proving once again that the pen is still the mightiest tool of all.

Logitech

Logitech io2 Digital Writing System

Logitech io2 Digital Writing System

Digital Pen

- Memory stores up to 40 handwritten pages or 150 one-page forms between transfers
- Battery lasts 8-10 hours with normal use and recharges when cradled
- Color ID tags for customizing your pens
- 5 ink refills
- 2-year limited hardware warranty

Write2Data Digital Pen System

- Increases efficiency by reducing data entry or trips to the mailbox or fax machine
- Eliminates the need to physically transfer forms by replacing these channels with a single electronic delivery system
- Reduces or eliminates keyboard data entry of handwritten information with the use of intelligent character recognition (ICR)
- Eliminates sections from a multipart form—since the data is being captured digitally, you can use the same information in multiple parts of the form, eliminating the need for additional sections
- Improves disaster recovery by automatically storing each digital image on backup drives
- Enhances security by assigning pens to individuals

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