



Mobile E-Ticket (MET)

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Enabling the users to stay in the field and do their job with minor help using technology has lead to dramatic increases in productivity. This application fits on something many of the users are familiar with and is an all in one, inexpensive device.

Challenge

City of Chicago ordinances require vacant properties and construction sites to be fenced in order to prevent fly dumping. Dumped debris and garbage create the risk of injury, rodent infestation and can lead to deterioration of the neighborhoods. The Department of Streets and Sanitation is responsible for identifying, cleaning and ticketing vacant lot owners who don't comply with the ordinances and allow dumping to occur on their properties.

In 2006, the Department of Streets and Sanitation (SS) working with the Department of Innovation Technology (DoIT) implemented a ticketing solution called LOTS. This effort automated a heavily paper based, manual workflow. The automated workflow introduced an application that provided mapping and data entry on rugged laptops as well as a camera interface. Field supervisor used the tool to log vacant lot violations. A website was developed to provide access to the field data for processing and ownership determination by the code enforcement division. LOTS automated and divided work between field staff who identified violations and cleaned the lots and code enforcement staff who used a website to determine ownership and issue tickets. Although LOTS showed promise as an application, the high price tag for rugged laptops prevented a full scale deployment.

Solution

In 2009, the departments of Streets and Sanitation and IT targeted Blackberry technology to make the project more affordable. A Blackberry Enterprise System was already in place at the City providing a secured network. The project was introduced the spring of 2010 with a new name Mobile E-Ticket (MET). Over 125 Streets and Sanitation Ward Superintendents and Refuse Collection Coordinators were provided with the Blackberry devices at a cost of less than \$100,000 for equipment, accessories and carrier service for a year. Electronic ticketing through the use of Blackberry devices is a cost effective and efficient way of identifying violations, recording field notes and collecting evidence in the form of photos as well as GPS location of the violation.

Initial E-Ticket pilot hearing cases showed an increase in findings favorable to the City. The best case scenario for the City would be a reduction of fly dumping in the neighborhoods due to higher compliance.

MET Workflow

1. Violations are identified in the field using Blackberry, field notes, picture and GPS coordinates are collected and sent to E-Ticket database. The City's reverse geocode web service sends an address which is flashed to provide GPS location validation.
2. Code enforcement under supervision of Department of Law identifies the property owner using GPS location on a map with parcels and buildings and uses PIN information to determine ownership from Cook County Recorder of Deeds and other resources.
3. Once property owner has been identified ownership information is typed into the database. Usually an electronic version of the deed is attached to the incident and used as evidence of ownership at the hearing.
4. The electronic ticket is created and assigned a case docket number, hearing court room, hearing date and time and transmitted electronically to the Administrative Hearings Management System (AHMS) for adjudication. Any document attached to the E-Ticket incidents is available through the AHMS and can be pulled up at the hearing.

