Urayasu City, Chiba Prefecture

Local government reduces time and cost of processing paper forms with dynamic 2D barcode technology from Adobe

URAYASU CITY, CHIBA PREFECTURE, JAPAN

http://www.city.urayasu.chiba.jp/

INDUSTRY

Government

CHALLENGES

- Move staff and constituents from familiar paper-based processes to more automated digital processes
- Reduce time and costs to process forms from constituents
- Improve constituent services with e-forms processes

SOLUTION

- Process management
- Online citizen services

Urayasu City in Chiba Prefecture is using Adobe solutions with 2D bar codes to streamline handling paper forms submitted by constituents.

RESULTS

- Reduce staff time spent rekeying and processing information submitted on constituent forms
- Improve the accuracy and reliability of captured data by minimizing input errors
- Enhance constituent services
- Decrease city administrative costs

IN PARTNERSHIP WITH

- CDC Solutions Co., Ltd.

www.cdcsol.co.jp

Improving government services

Just 15 minutes outside Tokyo by high-speed rail, Urayasu City is a modern, bustling resort town that faces many of the same challenges as any other municipality. Paper-based forms dominate government processes, costing officials unnecessary time and money to respond to citizen requests. To better understand these challenges, Urayasu City participated in the Japanese Ministry of Internal Affairs and Communications' E-Municipality Promotion Pilot Operations to help develop specifications for making Internet-based filings for governments a reality. "We determined that we could efficiently promote electronic applications and started development of e-application forms," says Keiji Daigo of Urayasu City's E-municipality Promotion Office in the Information Policy Department, Management Planning Division.

As part of the city's efforts, employees conducted a fact-finding survey about the types of applications and filings being submitted by constituents. They found the city was handling 1,041 types of application forms, with approximately 79,000 applications filed annually. Staff also looked at which forms were filed more than 1,000 times annually and found that only a small percentage of form types, roughly 10%, accounted for more than 90% of all filings. "The survey was extremely helpful in promoting electronic automation. In short, we looked at the most commonly used forms and—after excluding forms that could not be legally automated or those that required a resident to come to a service window—determined that it would be good to automate approximately 30 different application forms," says Daigo.

Building an efficient, digital workflow

As part of the system-building, Urayasu City started a form download service, based on Adobe® Portable Document Format (PDF), so constituents can digitally access the forms they need. Eventually, the city plans to build and operate a complete electronic application system that supports Japanese government online payment systems for e-applications. Urayasu City has promoted digitization by designating the ultimate purpose of e-applications to be, "The Improvement of Government Services to City Residents." According to Daigo, it was impractical to start with a single comprehensive electronic forms system. To achieve something convenient and easy for constituents to understand an approach was decided upon to make electronic application forms available to citizens as an extension of paper-based forms.

With that, the city assembled a system built on "e-nexPort", a comprehensive, front-end system based on Adobe PDF and developed by CDC Solutions Co., Ltd. "Because it is based on Adobe PDF, e-applications can be done as an extension of paper forms and the system can be built inexpensively," says Daigo. "In addition, because the system was created in component sections, we can eliminate unnecessary functions and add needed capabilities." These features lead to further cost reductions and formed the basis of a partnership between the city and CDC.

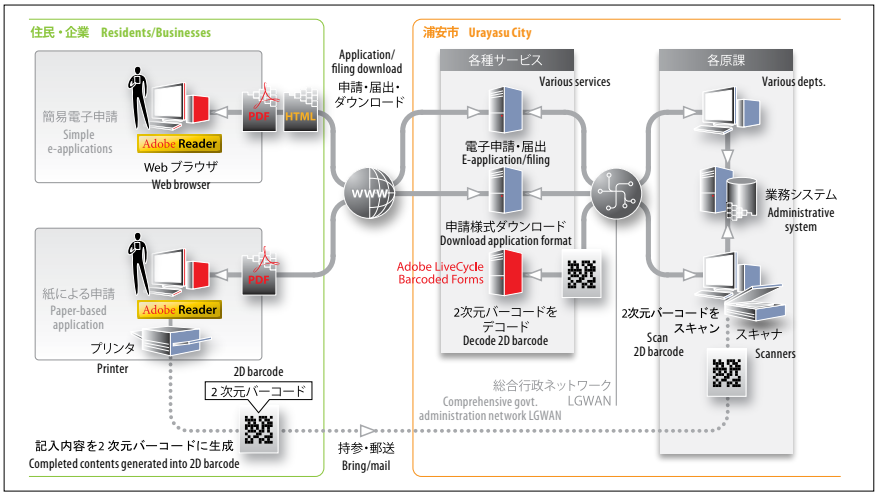
Supporting the way citizens like to work

Of the many form submissions Urayasu City received, officials concluded they could first automate processing forms that are completed electronically (either online or offline), then printed out for signature requirements or attachments. After successfully implementing this and gaining adoption, the city plans on adopting fully automated e-applications. Because of this planned evolution, the city was interested in using Adobe LiveCycle™ Barcoded Forms, which leverages 2D barcode technology.

A 2D barcode is a machine-readable symbol that stores information along its height as well as its width, capturing significantly more data than traditional one-dimensional barcodes. With Adobe LiveCycle Barcoded Forms, information filled into the electronic form is dynamically captured in the barcode. When the form is printed and submitted to Urayasu City, Adobe LiveCycle Barcoded Forms efficiently and automatically decodes the barcode and sends the extracted user-supplied form data to the next step in the organization's processing system.

Adobe

Urayasu City's Application/Filing Service System uses Adobe LiveCycle Barcoded Forms in its efforts to move toward an electronic City Hall.



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Keiji Daigo,
Information Policy Department,
Management Planning Division,
E-municipality Promotion Office,
Urayasu City

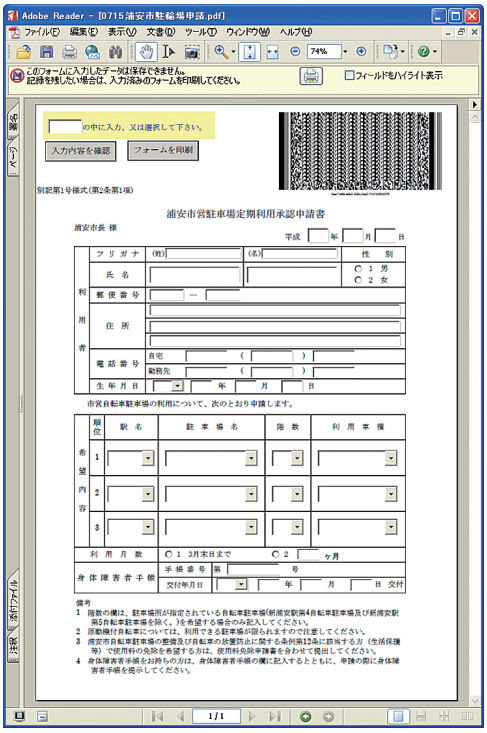
Many Japanese forms require a citizen's official seal (hanko) to be affixed as a personal means of authentication, so they are printed or filled in by hand. Most of the application form content is then manually keyed by hand into the administrative system. Daigo is adding Adobe's dynamic 2D barcodes to automate the processing of paper forms. "By introducing 2D barcodes, e-based processing of applications on paper becomes a reality, which I believe will result in fewer input errors, lower costs, and lighter staff workloads," says Daigo.

Expanding online services

Resident's choices for online services will be further expanded as the city adds 2D barcoded application forms and simple e-application forms to its existing download services. "If we consider the role of 2D barcodes in some sense as the role of a ship's pilot guiding the boat to digitization, then we can say that barcodes serve as the bridge from paper to electronic," notes Daigo.

The city will start by providing application forms for car parking lot passes with a 2D barcode application service and will next look at introducing forms to support over-sized garbage application services. After implementing the parking lot pass as barcoded Adobe PDF forms, Urayasu City will introduce a business registration service form requiring a citizen's official seal. Given its willingness to use technology, it's likely that Urayasu City—which believes an "e-municipality" is the effective implementation of IT technology to efficiently promote operations with few personnel—will steadily continue its march toward becoming an electronic City Hall.

Forms like this 2D Barcoded Form in Adobe PDF have been developed by Urayasu City to streamline its constituents handling and submittal processes for items such as parking permits.



SYSTEMS AT A GLANCE

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