

## PILLAR THREE:

# SMARTER SOLUTIONS FOR A CONNECTED GOVERNMENT

A citizen sits stranded at a bus stop late at night. Unsure whether she missed the bus or the bus is simply running late, she eventually resorts to calling a friend to pick her up.

Given the data and technology available today, citizens in any city should be able to access up-to-date transit schedules or other government information via smartphone. But that's not always the case. While many private sector companies have leveraged technology to improve customer service, government information and services often remain difficult to locate and navigate.

Granted, when it comes to improving the customer experience, government agencies often face challenges the private sector does not, including a dearth of funding, longer procurement cycles that complicate IT modernization, or rigid policies and regulations. But that doesn't have to stop government from connecting with citizens in new ways.

State and local government agencies can improve the citizen experience and address their challenges, but one-off solutions won't work. Instead, agencies must address their business problems holistically, develop solutions that enable the integration of platform services to create connected citizen experiences, and automate connections among systems. A cloud-based approach is key. Cloud can enable an agency to:

- Improve the customer experience in a coordinated way
- Move away from legacy technology and innovate
- Integrate mobility, the Internet of Things (IoT) and artificial intelligence (AI) derived from machine learning to increase efficiency and reduce costs
- Create an omnichannel experience that allows citizens to interact with government in the ways — and at the times — most convenient for them
- Add new capabilities as needed in the future

To better understand how it all works, let's examine a few areas where this approach is taking root in state and local government agencies across several verticals.

## IMPROVING THE CITIZEN EXPERIENCE IN SAN JOSE

As a community based in the heart of Silicon Valley, San Jose city leaders recognized residents had high expectations for innovation and participation. Passed by the mayor and city council in 2016, the San Jose Smart City Vision sought to help citizens engage city government in safer, more inclusive and user-friendly ways. As part of this vision, city leaders launched Project ACE (Amazing Citizen Experience) at the end of 2016 to transform how the city provides services and information, break down information silos and improve operations.

ACE includes advanced customer engagement features prioritized by the community: removing abandoned vehicles, addressing illegal dumping, fixing potholes, repairing street lights and cleaning up graffiti. Citizens report these issues via whatever channel they choose — phone, website, chat or mobile app. The solution uses a platform-based approach and integrates the city's back-office systems, automatically routing citizen service requests to the work crews in charge of responding.

Today, the city can make decisions based on real-time data and analysis. Lessons learned regarding communications, process engineering and user-centric design have helped

(Continued on page 4)

**AGENCIES MUST ADDRESS THEIR BUSINESS PROBLEMS HOLISTICALLY, DEVELOP SOLUTIONS THAT ENABLE THE INTEGRATION OF PLATFORM SERVICES TO CREATE CONNECTED CITIZEN EXPERIENCES AND AUTOMATE CONNECTIONS AMONG SYSTEMS.**



# DRIVING ECONOMIC GROWTH THROUGH STREAMLINED COMMUNITY DEVELOPMENT

As state and local governments move toward a more connected digital environment, there are many areas ripe for transformation. One such area is community development, which is the heartbeat of any municipality seeking to attract new businesses and expedite the construction and renovation of schools, town centers, office parks and homes — projects that will ultimately revitalize communities and create jobs.

Today, many community development and city planning departments are burdened by cumbersome and paper-driven processes, where multiple individuals and agencies must examine and approve a series of sequential and time-sensitive actions using manual processes that have been in existence for decades. Many cities and counties also have antiquated legacy systems that operate in business silos, unable to communicate with other departments.

A new solution — Oracle Public Sector Community Development — enables government entities of all sizes to improve and facilitate land development and economic growth while ensuring public safety and accountability. This solution gives local government a system to streamline the permit process with configurable workflow automation, spatial intelligence, mobile technology, advanced analytics and the ability to integrate back-end financial systems.

This new category of transactional service can accelerate the routine business of government through end-to-end assisted digital workflow solutions and will ultimately take advantage of what is now routine in commercial transactions: online payments, email and text reminders, mobile approvals and sophisticated mapping capabilities give builders, city planners and citizens an instant snapshot of any parcel of land with its permit status.

Oracle's solution takes advantage of the latest advances in technology, such as AI, chatbots and cloud-powered software that quickly guides users to the resources they need, without shuffling between license counter employees or visiting countless websites. Moreover, the solution fits squarely with Oracle's cloud-based back office systems for procurement, finance and supply chain needs, expediting payments and making most transactions as easy as booking a hotel room or ordering a pizza.

The benefits are many. Agency staff can reduce paperwork, phone inquiries and in-person office visits while speeding up the routine machinations of government and increasing productivity. Real-time connectivity between developers and local government on the progression of permits reduces idle time. And citizens, especially those not accustomed to the complexities of home construction, can get quick and easy answers to their questions through a guided online experience.

The solution has launched initially with the permit and inspection process. Additional capabilities for planning and zoning, and finally code enforcement, will be rolled out in coming months.

From the homeowner seeking to install a new water heater to the developer building a new, upscale town center for shopping and dining, the manual process of securing permits for land use, water, electricity and construction today often involves an in-person trip to a local community development office. Moving to a digital solution speeds up the construction process and saves time and money through faster approvals of inspections, without requiring a trip to city hall to fill out forms and make payments. Moreover, every new construction project is an opportunity for cities to become even more connected through a safer, sustainable digital infrastructure with sensor-enabled monitoring.

Learn more at: [www.oracle.com/communitydevelopment](http://www.oracle.com/communitydevelopment)

reshape the city's customer relationship management system into a true digital services transformation affecting 170,000+ citizen requests per year.

## **RESPONDING TO THE OPIOID CRISIS IN MASSACHUSETTS AND ILLINOIS**

Every day in the United States, 91 citizens die from an opioid overdose — a rate of one person every 16 minutes, according to the Centers for Disease Control and Prevention. Looking for a better way to provide citizens information and referrals on substance abuse prevention and treatment resources, Massachusetts and Illinois moved to a cloud-based solution. The new solution helps individuals with opioid use disorder and their families, caseworkers and treatment providers better access information and resources.

For example:

- Individuals suffering from opioid use disorder, their family members and their caseworkers can access a portal, answer a few short questions and receive real-time detailed information on the most appropriate resources and/or treatment facilities based on their location, health insurance coverage and the substance(s) they are using.
- Treatment providers can update the information about their services in real time — including up-to-the-minute reflection of current waitlists.

Both the Illinois portal and the Massachusetts portal were implemented to assist call centers operated by Boston-based Health Resources in Action (HRIA). The underlying software is cloud-based, which means it can be set up and configured quickly at a fraction of the cost and time of traditional portal implementations. The portals don't replace the call centers, but rather work in tandem with them to provide citizens additional channels to receive assistance.

The solution allowed Massachusetts to handle more than 23,000 calls and 147,000 website visits in 2017.

## **SAFEGUARDING ENVIRONMENTAL COMPLIANCE IN OHIO**

The Ohio Environmental Protection Agency (EPA) uses an environmental permit, license and registration information one-stop "wizard" to offer citizens an easy-to-use, online permitting experience. Every business, from a manufacturer to a body shop, restaurant or dry cleaner, has specific regulations with which they must comply. Using Ohio EPA's online wizard, businesses can determine which permits,

registrations, licenses or notifications are required by either the federal or state EPA. The wizard directs the user through a series of questions and uses the answers and embedded logic to determine if a permit is required.

The wizard contains paths for common business/industry types as well as a separate path for individuals who may be using the tool to find occupational licensing requirements or environmental health issues that may overlap with federal agencies such as the U.S. Department of Agriculture or the Occupational Safety and Health Administration. Most references to EPA regulations and jargon have been purposely omitted wherever possible. The tool is based on Oracle Policy Automation, which helps organizations in all industries effectively deliver services and consistently determine policy obligations while maintaining full compliance with laws and regulations. The solution aims to increase compliance, reduce call-ins and promote consistency in customer-facing guidance.

## **THE ORACLE APPROACH: AN INTEGRATED, CITIZEN-CENTRIC EXPERIENCE**

Today, many state and local government agencies make customer service a key part of their IT solutions. But improving the citizen experience requires a holistic, business-focused approach. The Oracle Customer Experience (CX) platform — services, social, mobile and marketing — offers a complete solution that enables integration across platforms. And because Oracle solutions integrate evolving technologies like the IoT and AI, they help government become smarter and citizen-centric. Agencies can reduce repetitive and menial tasks, improve transparency, remove barriers to interaction and help boost economic development across an array of industries throughout state and local government. For example, in cities, Wi-Fi-enabled street lights can monitor and control traffic flow; trash cans can signal for pickup; the HVAC unit in the county courthouse can alert maintenance about a needed filter change to prevent costly repairs; and a transit system once on the brink of bankruptcy can generate new revenue streams by serving up geo-located digital ads to riders.

Perhaps most importantly, such solutions help citizens like the woman stuck at the bus stop late at night. Instead of waiting and wondering, she can now use her smartphone to see exactly where the bus is, its estimated arrival time and even how many passengers are on the bus so she can predict whether she's likely to have a seat or not once it arrives.

**For more information on Oracle cloud solutions, visit [oracle.com/publicsector](https://oracle.com/publicsector).**

**ORACLE®**