e-Services Web Portal: A Virtual Public Counter

Overview - Placer County launched an online portal (e-Services - https://www.placer.ca.gov/eservices) to streamline the complex planning permit process and modernize the customer experience with 24/7 support services.

Challenge - The primary functions of the Placer County Community Development Resource Agency (CDRA) include overseeing plan reviews, construction permits, and inspections that guide the physical development of the unincorporated area of the county. County, state, and federal development regulations, processes and procedures can be difficult to navigate and comprehend. This complexity can result in customers missing important steps and cause delays in processing applications. It can lead to customers being frustrated, possibly even withdrawing from the process altogether. Furthermore, in today's technology-driven world, customers expect to be able to access all services and easily obtain specific information 24 hours a day, seven days a week.

Solution - CDRA engaged the Placer County Information Technology Department (ITD) early in the planning process to develop an optimal technological solution (e-Services) accessible on any device at any time. e-Services provides CDRA customers a simplified permit submittal process, reduces turnaround times from application to action, delivers accountability and transparency through metric-based reporting and offers efficient and effective communication tools that can be used anytime, anywhere. The collaborated effort focused on identifying technology solutions that aligned not only with CDRA business objectives to ensure the potential business value could be recognized but also aligned with ITD's strategic objectives of Service Delivery Innovation, Cloud-Based Technology, Accessible Government, and Business Automation as well as with Placer County's three Critical Success Factors of: Strategic Relationships and Community Engagement, Innovative, Implementation-focused County Services, and Land Use Planning and Environmental Stewardship. The e-Services portal includes five main components:

1. CDRA Website Revamp – This new CivicPlus web content management system presents a modern look and user-oriented layouts which enables citizens to search for information by logical topics.

2. Q-less – A customer management and appointment scheduling system that reduces public counter wait times by allowing customers to join the line before arrival or schedule an appointment. The system provides text-message based notifications on wait times to keep customers up to date on their visit.

3. Permit Guide – An application that allows users to easily research potential development projects in the county. With only a few clicks, customers can find potential parcels with compatible zoning, display permit requirements, and receive fee estimates. The intuitive interface also offers the applicant to initiate the e-Permit application process.

4. E-Permit Services Expanded – The ePermit program has expanded the available payment options and will soon allow for secure logins and submittal of several application types including building permits and land use.

5. Placer Chat – The emerging technology, commonly referred to as chatbot, utilizes artificial intelligence and the Google Cloud and Amazon Web Services platforms to assist customers in finding information by voice command (via Google Assistant or Amazon Alexa). Citizens also have the option to utilize the web user interface on Placer County's chatbot website (https://placercountychat.appspot.com/).

Innovation - The e-Services program achieved two of Placer County Information Technology Department's initiatives, which include: 1) Moving to a cloud-based, software-as-a-service (SaaS) model solution to reduce operating costs and expedite service delivery and 2) Implementing an artificial intelligence/machine learning platform. ***Placer County became the first California county to not only deploy an artificial intelligence/machine learning chatbot program on the Google Cloud Platform but was also the first California county to deploy a chatbot application on Alexa, Amazon's cloud-based voice service.*** Utilizing Google's and Amazon's Alexa cloud platforms, the chatbot programs provide customers real-time integration with Placer County's GIS application as it delivers zone and parcel information. A web user interface version of the chat application is also available for use. Customers now have over 120 question and answer scenarios available with a combination of static and dynamic questions and are expanding on a daily basis.

Results - Implementation of e-Services has delivered a package of online self-service systems that empower customers and CDRA staff to complete a majority of routine service requests quickly and simply. The innovative tools have helped resolve most common questions without needing to speak directly with staff that are available during business hours. For customers needing to pay an office visit, e-Services has alleviated their frustration with reduced and predictable wait times. Since its inception on April 12th, 2019, the Permit Guide Portal has provided information and fee estimates on 412 projects and granted zoning guidance to over 219 inquiries, resulting in a saving of 285 staff hours. The e-Services program has been set up to continuously gather feedback and make ongoing improvements to the system. e-Services 2.0 is being planned now, and when implemented, both the customers and CDRA staff will benefit from the continued efficiency gains.

Replicability - The e-Services program is very replicable for other California counties as it employs commercial off-the-shelf solutions that specialize in e-government services. The cloud-based technological solutions are cost-effective and leave the day-to-day maintenance activities such as software and hardware upgrade to the vendors. With Placer County being the first California County to employ chatbot applications on both the Google and Amazon Cloud platforms, it has established a set of "best practice" methodologies on chatbot implementation. In fact, Placer County has already shared its chatbot expertise and best-known methods with another California county.

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Optional Submission – Please visit https://www.placer.ca.gov/5751/CDRA-e-Services or view the **e-Services.htm** file on the attached USB drive for e-Services video overview, demos and promotional material.