



Office *of* Data and Innovation

Benefits Recommender: Shortening the distance between awareness and access for Californians

2023 NASCIO Award Nomination

State: California

Agency: Government Operations Agency

Award category: Emerging & Innovative Technologies

Project dates: April 2022 - February 2023 (pilot) and ongoing

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Executive Summary

Idea

Californians are eligible for more benefits than they claim, possibly because they are unaware of the benefits available. The Benefits Recommender uses simple, existing technology in an innovative way, meeting people where they are on a benefits journey and connecting them into a web of care that breaks stereotypical government silos. The Recommender is a lightweight web component, or widget, generated on a government website once an individual has applied for an assistance service, like unemployment benefits. Based on that context, other assistance programs are suggested to the applicant. This approach mirrors technology used in the private sector to sell products. In this case, the product is public benefits. The Recommender uses analytics, a fast-loading prototype, and coordination across multiple agencies to provide resources in a user-friendly way to Californians.

Implementation

The Recommender team in the Office of Data and Innovation used a human-centered design lens to leverage existing web properties and daily web traffic against user journey data and UX best practices. User research included analyzing data to uncover which *additional* benefits applicants might be interested in and potentially eligible for. These findings were then translated into a technical solution tailored to actual user needs. As a technical solution, the Recommender widget is just 2 lines of code that requires a one-time integration for placement partners, with no maintenance overhead or tech debt to deal with. The widget is responsive and integrates smoothly into any given website's design by inheriting fonts and styles. The pilot phase resulted in widget placements on three Employment Development Department (EDD) benefits pages, referring users to six additional benefit opportunities outside of EDD.

Impact

The Benefits Recommender successfully eases the burden of finding benefits by reaching Californians while they are in a benefits application mindset. Compared to advertising, the Recommender widget is low-to-no cost and the audience reached is more targeted, without compromising user privacy. Data from the pilot phase show that the Recommender received 2.1 million views and had a click-through rate of 8.5%, resulting in over 4,300 new benefits applications.

Idea

Increasing uptake of available benefits by Californians

Californians are eligible for more benefits than they claim, possibly because they are unaware of the benefits available. The Benefits Recommender increases awareness of benefits, shortens the distance between awareness and access, and helps decrease the participation gap. The Recommender is a lightweight web component, or widget, generated on a government website once an individual has applied for an assistance service, like unemployment benefits. Based on that context, other assistance programs are suggested to the applicant. This approach mirrors technology used in the private sector to sell products. In this case, the product is public benefits. The Recommender uses analytics, a fast-loading prototype, and coordination across multiple agencies to provide resources in a user-friendly way to Californians.

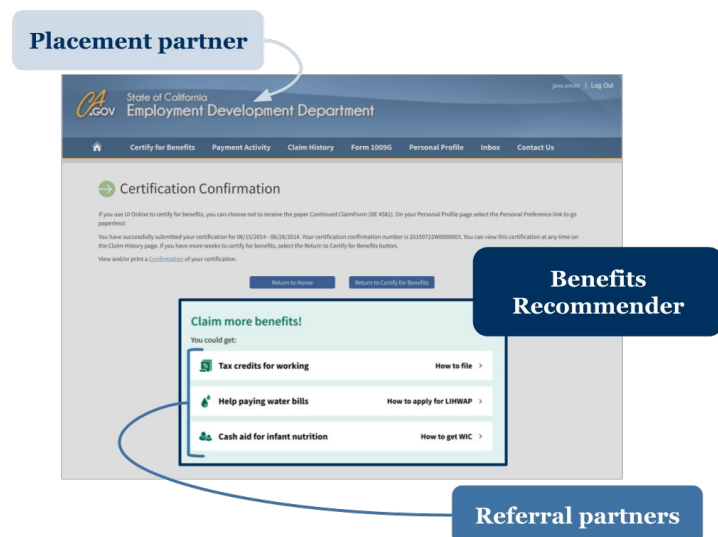
Finding efficiencies in the CA.gov ecosystem

Using CA.gov web properties to make people aware of benefits is a smart, cost-effective way to advertise relevant content to the millions of Californians visiting these domains daily. This strategy replicates a core principle of private sector web advertising: find people where they are and serve them content that is relevant and timely. Looking at data from April 2022, 19 million Californians visited CA.gov websites. Based on benefits-related search data, 3% (or 582K) are potential benefits applicants.

Essentially, the Recommender operates like a paid banner ad—except it’s running cost-free on state government pages. In its pilot phase, the Recommender demonstrated that a rules-based tool for promoting awareness of, and linking to, relevant public benefits will successfully drive meaningful numbers of applicants to these programs. This has the potential to decrease the participation gap in a manner significantly less expensive than an equivalent advertising campaign.

A scalable concept

The Benefits Recommender uses simple, existing technology in an innovative way, meeting people where they are on a benefits journey and connecting them into a web of resources and social safety net benefits that breaks stereotypical government silos. The Recommender



is an elegant two lines of HTML code added to an existing webpage, typically the confirmation page of a completed application for a well-known benefit.

Although the context of this project is benefits, the Recommender concept translates to myriad opportunities across sectors of state and federal government. Program awareness is a universal challenge in the public sector. Technology solutions such as the Recommender can drive awareness as part of a user-centered framework for digital services, thus addressing one of the State CIO Top 10 Priorities, Digital Government / Digital Services. Offering people a benefit—and making it easy for them to get that benefit—results in a positive experience with government.

Implementation

Would a new benefits portal help?

In April 2022, the California Governor’s Office was interested in understanding if a new benefits eligibility portal or benefits app could help increase benefits participation. To explore this question, the Office of Data and Innovation (ODI) conducted a landscape review of current and past benefits eligibility tools, including Californian-facing portals and administrator-facing tools.

ODI found 15 active Californian-facing portals, including BenefitsCal.com, which is already making incredible progress creating fundamental and lasting change in how Californians access benefits. The landscape review suggested that adding another benefits eligibility portal would not offer the most effective approach for increasing uptake of available benefits by Californians.

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Thank you for driving this exciting progress in Californians' engagement with accessing benefits!

– Michael Tubbs, Founder of End Poverty in California

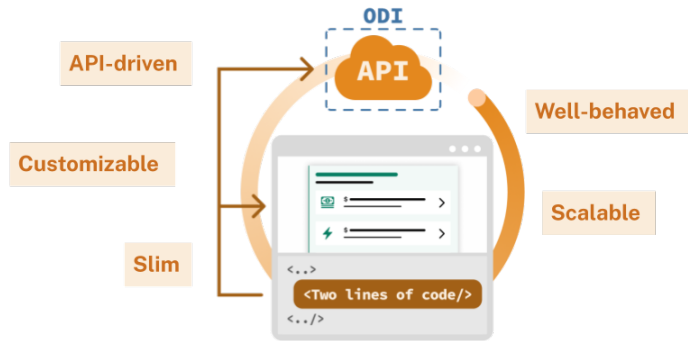
Meeting people where they are

Instead, ODI used a human-centered design lens to leverage existing web properties and daily web traffic against user journey data and UX best practices. User research included analyzing data to uncover which *additional* benefits applicants might be interested in. These findings were then translated into a technical solution tailored to actual user needs.

Although the concept of cross-program referrals is not novel in government, existing referral links on CA.gov websites typically are based more on intuition than on data and are frequently located on comprehensive resource pages, which can be overwhelming for users to navigate. In contrast, the Benefits Recommender appears at the end of a benefits-focused user journey, offering the opportunity to seamlessly learn about and apply for additional, relevant benefits.

As a technical solution, the Recommender widget is owned and maintained by ODI. It can be installed on ca.gov websites with minimal effort: it is just 2 lines of code that requires a one-

time integration for placement partners, with no maintenance overhead or tech debt to deal with. The widget is responsive and integrates smoothly into any given website's design by inheriting fonts and styles. Every time the widget loads on any given webpage, it calls on an API to access business logic and historical user data, which enables the Recommender team to track analytics and continually optimize the design.



Partnering for a successful pilot

ODI's Benefits Recommender team built relationships with subject matter experts at the Department of Social Services, Department of Public Health, and Department of Community Services and Development, as well as benefits-focused agencies and departments, including the Health and Human Services Agency, Employment Development Department, and Franchise Tax Board.

A network of aligned partners was essential to coordinate various aspects of benefits referral language and language access, to manage the expected volume of traffic on website placements and additional customer service center calls, and to receive downstream enrollments. The Governor's Office sponsored this project and provided executive leadership.

The pilot phase resulted in widget placements on three Employment Development Department (EDD) benefits pages: the State Disability Insurance application success page, the Paid Family Leave application success page, and the Unemployment Insurance biweekly certification page. These placements provided referral links to:

- CalWORKs (California Work Opportunity and Responsibility to Kids) – help for parents to work or study
- CalFresh – money for food
- CalEITC (California Earned Income Tax Credit) and other tax credits
- LIHEAP (Low Income Home Energy Assistance Program) – help paying energy bills
- LIHWAP (Low Income Household Water Assistance Program) – help paying water bills
- and WIC (California Women, Infants and Children) – healthy food for growing families

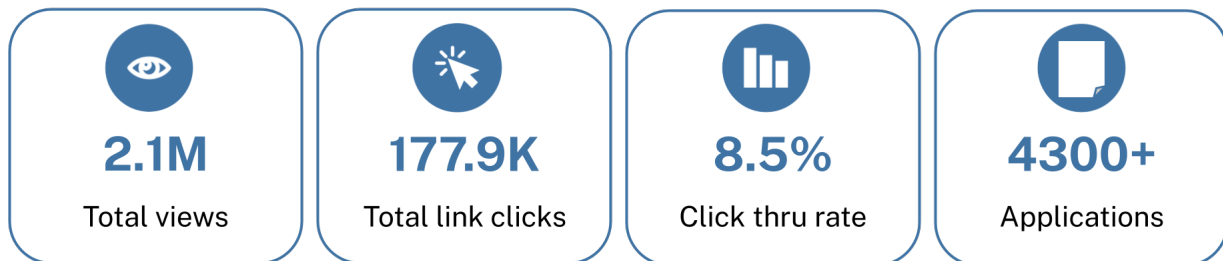
Data from the pilot phase show that using existing, lightweight technology in a novel implementation is successful. Results for a 24-hour test of the Recommender widget indicate that for every 12 views, 1 person clicked on a link in the widget. That is a phenomenal response rate of more than 8%, compared to average rates for similar private sector ads ranging from 3-12%.

The greatest challenge in creating a referral program like the Recommender in state government is stakeholder engagement. While project stakeholders were enthusiastic and supportive of this initiative, it came on top of already established—and heavy—workloads. It took several months for ODI’s Benefits Recommender team to identify and collaborate with the first placement partner, EDD. Lessons learned during pilot phase stakeholder engagement will inform how to ease the onboarding of partners in the future. For example, the Recommender team provided EDD with a script that allows call center teams to answer widget-related questions. The script was developed in response to EDD feedback and helped their call center teams provide accurate Recommender information to callers, and it was also an important trust-building exercise between ODI and EDD. Not only does this script improve departmental processes, but it also offers an opportunity to collect data and integrate call sentiment into the Recommender validation process.

Impact

The Benefits Recommender increases awareness at minimal cost

Data from the pilot phase support the idea that people in a benefits mindset are interested in getting more benefits. The Benefits Recommender successfully eases the burden of finding benefits by intersecting Californians while they are in such a benefits mindset. For example, with a single high-traffic placement, the Recommender was able to drive an increase in daily CalFresh signups by 10-20%.



Results from 11/22 - 02/23

Compared to advertising, the Recommender widget is low-to-no cost and the audience reached is more targeted, without compromising user privacy.

This success also comes with low technical risk. Placement sites for the Recommender did not see any adverse effects during the pilot phase: sites did not go down, throttles were not exceeded, and support and county-level benefits teams were not burdened by traffic spikes.

Beyond the pilot phase

Extending the impact of this pilot requires continuing to align leadership and build partnerships with technical and program teams. The next phase of the Benefits Recommender, which began in April 2023, is focused on scaling. The team at ODI will be testing the widget with additional placement partners to expand the reach of the tool and learn from more examples. They will also be

tracking longer-term downstream data to further validate the efficacy of the Recommender approach and refine the model. Finally, work in this next phase will begin to explore opportunities to augment or extend the Recommender's functionality.

Opportunities to explore for future iterations of the Benefits Recommender

 Design & copy Regularly A/B testing different copy and design	 Rules informed Establishing baseline criteria for who sees the widget where	 Geofencing Offering benefits through your county's specific mechanism
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