



Recommendations for modernizing OneApp using USDS' prototype

Summary of document

In June 2020, the United States Digital Service (USDS) partnered with the New Jersey Department of Human Services (DHS) to redesign NJ OneApp, New Jersey's online application for Supplemental Nutrition Assistance Program (SNAP), Temporary Assistance for Needy Families (TANF), and General Assistance (GA) benefits. USDS' objective was to improve the overall application experience through accessible language and a mobile-first design approach, in order to reduce time spent filling out an application and provide the most accurate, complete information to caseworkers who process applications. USDS believed that this would result in a faster, more efficient process for delivering benefits to those in need.

In December 2020, USDS paused the OneApp redesign when DHS was awarded a Progress Technology Improvement Grant (PTIG) from USDA. As part of the grant, DHS and a vendor will embark on a redesign of NJ OneApp and create a new customer service portal and text message notification system for NJ residents who are in critical need of food or cash assistance.

This document highlights USDS' design and technical recommendations from this engagement. These recommendations are intended to support DHS leadership and the NJ OneApp team as they modernize the application or have the opportunity to revisit this prototype.

Recommendations

Design

- 1. Conduct usability testing iteratively to ensure that applicants understand the process of receiving benefits, the language in the application, and how to use the new interface, which will decrease applicant confusion, improve the accuracy of their information, and reduce the need for hands-on support.**

- Test with applicants of different ages, levels of education, socioeconomic status, familiarity with social safety-net benefit program applications, and cognitive and physical abilities to ensure the application is simple and easy-to-use for everyone.
- Conduct testing with caseworkers and staff at community-based organizations (CBOs) who fill out the application for others and support applicants who use DHS tools.

Outcomes

- Findings from usability testing are used to help DHS meet applicant and caseworker needs, make edits to content, or fix bugs, which will save New Jersey time and funding by addressing critical issues during initial development cycles rather than when issues arise.

2. Use plain language so that applicants don't need technical, legal, or government expertise to understand the benefits process.

- Write content at a fifth grade level¹, so that applicants at all reading levels and non-native English speakers can understand it.
- Write questions in plain, conversational language. Use a warm, reassuring, and encouraging tone to combat the lack of empathy that applicants perceive when interacting with government services online.
- Use simple terms to describe the application process, provide context for why DHS needs information, and how they'll use it. If legal or technical terminology must be used, include a simple definition. Simple images and icons should be used, where applicable, to provide further clarity around the written content and break up long blocks of text.
- Create new content that addresses concerns that applicants have, like how SNAP affects their family's immigration status, that aren't in the application today and could decrease confusion around evolving policies.

Outcomes

- Applicants can complete the full application without caseworker or CBO support, freeing them up to review applications rather than contacting applicants to collect additional information or correct information that was entered incorrectly.
- Caseworkers and CBO's are able to spend time providing hands-on support to people who actually need it.

3. Display only the questions that are necessary to process an application for the program(s) (SNAP, TANF, and/or GA) the applicant is applying for to reduce burden on the applicant, as well as provide the most accurate application to caseworkers for processing and eligibility determination.

¹ Code for America, Blueprint for a Human-Centered Safety Net, Principle: "[Easy to understand](#)"

- Make it simple for applicants to apply to multiple programs. Create one entry point for SNAP, TANF, and GA applications, and design a homepage that introduces each program².
- Present information to applicants based on their response to specific questions. For instance, expedited and non-expedited applicants should receive different messaging about next steps and the timing of their benefits. Or, applicants that have wages can be prompted to upload paystubs or other documents before the official verification request.

Outcomes

- Applicants applying for multiple programs answer a tailored set of questions, reducing the burden on the applicant to enter information that isn't needed and providing caseworkers with a more accurate application for specific programs.

4. Set expectations and be transparent about next steps to reduce applicant anxiety, decrease calls to county offices, and help applicants make informed decisions at every step.

- Specify what applicants can expect at each step in the process and which documents will be required so that they can gather pay stubs or other documentation in advance. Include a step-by-step explanation of the process at the beginning of the application as well as next steps on the submission confirmation page so that applicants feel informed and prepared.
- Implement an online status tracker to show applicants where they are in the process and what's needed from them.
- Provide clear instructions for when applicants can contact their county, along with reliable contact information. Process changes at the county level and clear notices that follow the SNAP Model Notice Toolkit³ may also be needed to ensure applicants have the information they need at the right time.

Outcomes

- Status tracker allows applicants to self-serve rather than calling the county office for application status updates.
- Applicants can gather documentation in advance, leading to quicker processing times for applications.

5. Establish user-focused success metrics and instrument analytics to understand if the new OneApp meets user needs.

- Define user experience metrics, like time to complete an application or user abandonment rate, to inform or assess the impact of design decisions, such as those we recommend. The federal government (specifically, GSA) provides resources for

² Code for American, Blueprint for a Human-Centered Safety Net, Principle: "[Simple actions](#)"

³ USDA, [SNAP model notice toolkit](#)

federal agencies to develop their own analytics strategy; these resources can be leveraged by NJ as a starting point⁴.

- Use analytics to make continuous improvements and prioritize enhancements to the application.

Outcomes

- DHS can demonstrate how time, grant funding, or state funding invested in a human-centered benefits application has cut down the time to complete an application, increased accuracy of data in applications, or decreased the time from application to benefits. DHS' approach would be a model for other departments or states, like CalFresh, a human-centered application⁵ designed by Code for America.

Technical

1. Decouple the existing monolithic application architecture into microservices to make it easier to understand and scale the OneApp codebase.

- The existing OneApp architecture is one monolithic application. As this codebase grows, complexity grows at an exponential rate. Product velocity grinds to a halt, and the full life-cycle becomes burdensome. Break up the existing system into smaller pieces focused around atomic business functions, known as microservices, to align with best practices for product development and simplify the codebase.

Outcomes

- A microservice architecture will enable faster, more efficient development cycles. Developers can update individual components of the system without having to overhaul the entire application. This initial redesign will decrease the time and cost of ongoing system maintenance.

2. Focus on a flexible, stateless API-first design to decrease development time.

- Stateful APIs, which use client sessions to fetch data, add significant overhead and complexity, and are not scalable. Choose a flexible, stateless API technology, such as GraphQL, which provides declarative and efficient data fetching that is straightforward to develop on top of.
- As an example, USDS developed a GraphQL API for the OneApp modernization project, which decoupled the backend and frontend, enabled modernization of the system one piece at a time, and freed data from silos. This design will ultimately empower many other services downstream.

Outcomes

⁴ Digital.gov, "[How to build an analytics strategy](#)"

⁵ State of California, [CalFresh application](#)

- A flexible, stateless API allows the application to scale, while also improving efficiency for future development and maintenance.