GEORGETOWN UNIVERSITY | beeckcenter social impact + innovation | Digital Benefits NETWORK

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Building Modular, Reusable, and Flexible Components, Tools, and Formats

There are multiple advantages when teams create an effective code component, software tool, or design format that can be duplicated, modified, and repurposed. For example:

+ It allows what's effective to be reproduced for other benefit programs and government services
+ What's produced can be modified if necessary when policies or other components change
+ Repetition creates familiarity for users and reduces their burden of needing to learn how to use different systems or tools

For these reasons, duplicating, modifying, and reusing tools and components works well when integrating benefits and streamlining application and enrollment processes, in both technological and non-technological instances. This resource contains specific examples that highlight the advantages of designing reusable online features and forms, and the possibilities for connecting new components to existing system infrastructure.

In this document you'll find:

+ Information about how program-standard APIs can be used to promote improvements in benefits delivery
+ Ideas for integrating modular technical components into existing infrastructures
+ Ideas for designing non-technical components, like application forms, as modular and reusable pieces

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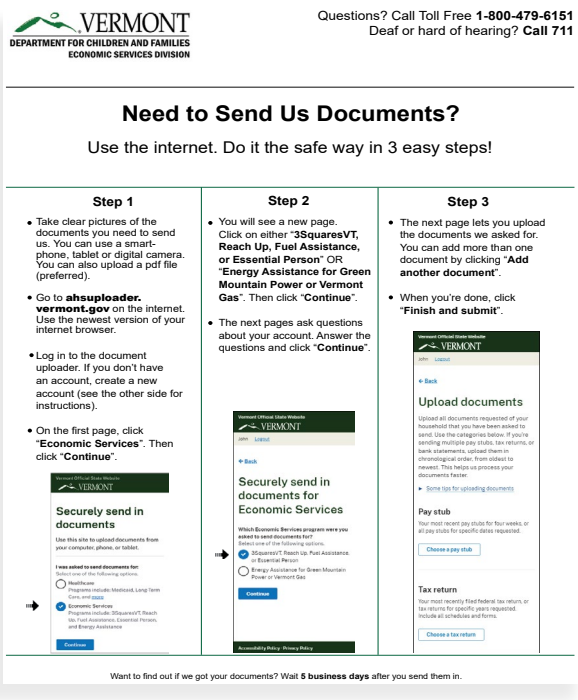
> We built the uploader to solve a common problem across many benefits programs: time wasted while submitting documents by mail or in person. To build it, we used components or patterns that can be reused for other applications: front-end design and components that can be adapted for a range of business needs; back-end code for securely formatting and storing submitted documents; and an automated uploader that reliably makes documents accessible to state staff. So, while the uploader was quickly adopted to meet Vermonters' current needs, the state can continue to reuse and expand upon it to cover more benefits programs and quickly adapt as policies change.
>
> **DOMENIC FICHERA**
>
> Product Manager, Nava PBC. From Integrating Eligibility and Enrollment, One Piece of Software at a Time.

Building Online Features for Reuse

While Nava PBC collaborated with Vermont's Agency of Human Services, they intentionally produced code, tools, and processes that are reusable and flexible. This approach lets the state modify and duplicate these assets across benefit programs with familiar designs and functions. For example, after the successful pilot of Vermont's online and mobile-friendly document uploader for the Supplemental Nutrition Assistance Program (SNAP), the team at Nava PBC worked with the state to cut out an extra process step for caseworkers (by having uploaded documents go directly and securely to the program's existing document management system). As more benefit programs in Vermont adopted the document uploader, the technological capacity to automatically upload submissions to the document management system via API came with it.



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DEPARTMENT FOR CHILDREN AND FAMILIES
ECONOMIC SERVICES DIVISION

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Need to Send Us Documents?

Use the internet. Do it the safe way in 3 easy steps!

Step 1

- Take clear pictures of the documents you need to send us. You can use a smart-phone, tablet or digital camera. You can also upload a pdf file (preferred).
- Go to **ahsuploader.vermont.gov** on the internet. Use the newest version of your internet browser.
- Log in to the document uploader. If you don't have an account, create a new account (see the other side for instructions).
- On the first page, click "**Economic Services**". Then click "**Continue**".

Step 2

- You will see a new page. Click on either "**3SquaresVT, Reach Up, Fuel Assistance, or Essential Person**" OR "**Energy Assistance for Green Mountain Power or Vermont Gas**". Then click "**Continue**".
- The next pages ask questions about your account. Answer the questions and click "**Continue**".

Step 3

- The next page lets you upload the documents we asked for. You can add more than one document by clicking "**Add another document**".
- When you're done, click "**Finish and submit**".

Want to find out if we got your documents? Wait **5 business days** after you send them in.

Instructions for using the Vermont Department for Children and Families' document uploader, posted on the Vermont Department for Children and Families website.

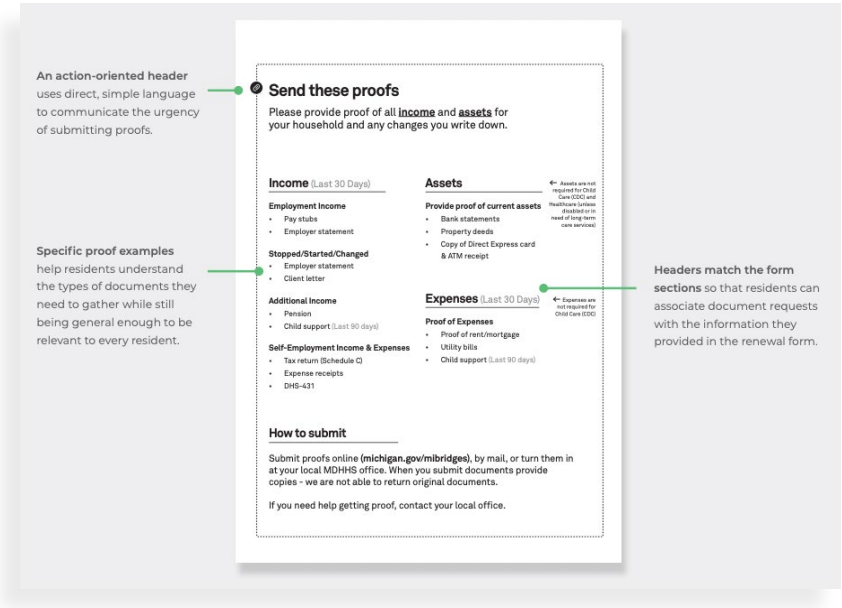
Nava is continuing to explore how APIs can be used to improve service delivery in their work on Women, Infants, and Children (WIC) programs. Although states each have a central management information system (MIS) which is the case management system for WIC programs, needed information and functions may be housed in multiple tools and systems, creating complications and burdens for participants and staff. A standardized API for WIC programs would create a consistent format for accessing and using data. It would also allow agencies to connect separate tools and systems and more quickly integrate new tools to better address client needs. In May 2022, Nava announced a six-month demo project with Montana's WIC program to test how a standardized API for WIC can help programs efficiently share and adopt digital tools. Creating and implementing a standardized API for WIC programs could save agencies time and money and promote innovation.

Connecting New Components to Existing System Infrastructure

As State of Minnesota IT staff worked with Code for America engineers to build their redesigned, integrated application for multiple benefit programs, the team made modules that connect to the state's existing routing and document storage services. Part of what made this possible was their decision to code the new modules in Java—the state's existing system language—and work through the state's existing enterprise system architecture. Collaborating in this way also allowed the partners to co-create a plan for the State of Minnesota IT staff to sustain the new system architecture and make future modifications when necessary.

Repurposing Forms that Work

Modular, reusable, and flexible tools don't need to be technical. For instance, during the redesign and integration of Michigan's renewal forms, Civilla designed a form that addresses one of the consistent pain points for clients: providing the right documents to verify their income, assets, and expenses. Called the "proofs page," it lists in clear, brief language the types of documents that residents could use to meet multiple verification requirements. The Missouri Department of Social Services, which is also partnering with Civilla on benefit redesign, will be using a similarly designed "verifications page" when their new renewal materials roll out in the near future. A tool like the proofs or verification page could also be modified to include in other benefit applications or for other purposes.



Civilla-designed "proofs page" for MDHHS. From Project Re:New: Designing Simple and Intuitive Renewals for Michigan's Largest Assistance Programs.

Find Out More on the Digital Benefits Hub

Read more about modular, reusable, and flexible components, tools, and formats in Vermont, Minnesota, Michigan, and Missouri:

- Power to the Public: The Promise of Public Interest Technology. Chapter 2: Design, Data, and Delivery.
- Integrating Eligibility and Enrollment, One Piece of Software at a Time.
- Observations from Successful Integrated Eligibility and Enrollment Projects.
- Four Lessons from Our Journey to Deliver Human-Centered Integrated Benefits.
- Project Re:New: Developing Simple, Intuitive Benefits Renewals.
- Project Re:New: Designing Simple and Intuitive Renewals for Michigan's Largest Assistance Programs.
- Missouri Benefits Enrollment Transformation: Transforming the Enrollment Process for End Users.

Find other resources to learn more about using modular, reusable, and flexible components, tools, and formats:

- Repeatable, Sustainable Processes for Building Benefits Systems.

About this resource:

This resource is part of a larger initiative by the Beeck Center for Social Impact + Innovation at Georgetown University to document innovations in social safety net benefits delivery that are driven by human-centered service design, data-informed practices, and responsive technology. It also has the goal of spreading proven practices more widely. This resource was adapted from the report "Integrating Social Safety Net Benefits: Options for State and County Agencies Informed by Recent Integration Successes," written by Sara Soka for the Beeck Center for Social Impact and Innovation in January 2022.

Much of the content in this resource is derived from a 2021 workshop featuring government employees who were instrumental in their state's integrated benefits efforts. The workshop, which was part of a series on the historic funding opportunities in the 2021 American Rescue Plan Act (ARPA), showcased different approaches to invest in infrastructure, human capital, and projects that integrate benefit applications, outreach, renewal, and service delivery.

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