2015 NASCIO Award Submission

Title: New Jersey Department of Health – Web Modernization Project

Category: Open Government and Data, Information and Knowledge Management

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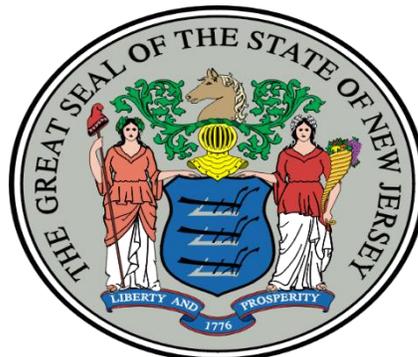
Executive Summary

The New Jersey Department of Health (DOH) had an antiquated Internet presence dating back almost 20 years. The DOH redesigned a new website and then worked with the Creative Services Unit of the State's Office of Information Technology (OIT) to ensure adherence to State standards, move capability online, and make offerings easily accessible via desktop and mobile devices. The project moved more than 173 functions generating $12 million in annual revenue to the new online offering. Creating a new design centered on how the consumer interacts with DOH.

The modernized website succeeded in:
- Offering an innovative and intuitive graphic interface that allows users to maneuver rapidly to the information and services they need.
- Giving visitors an online path for requesting meetings with the Commissioner.
- Allowing users to file applications and pay fees online
- Greatly expanding the number and availability of information about public health, health systems, and health quality.
- Offering open data that included dynamic visualizations and the ability to use analytics.
- Creating a system that allows access to DOH systems and registries from a single location.

This open data initiative encouraged increased citizen and provider participation by increasing convenience and the speed of obtaining information and services. It also eliminated huge volumes of paperwork, saving the State money.

Description of Business Problem and Solution

Problem

Consumers' expectations had greatly increased since the last time DOH updated its web presence in 1995. Researchers, hospitals, nursing homes, health and social service providers, municipalities, Federal and State agencies, and other stakeholders expect that information and data will be easy to find, well-presented, up-to-date, and accurate. It's given that users can transact business electronically. Medical facilities including hospitals and nursing homes want to register and pay licensing and examination fees online. They expected to be able to search a site for the information they need. They expect to perform these tasks both on their desktops and with mobile devices.

Instead, visitors to the DOH website found poor navigation and search capabilities. The site was confusing. Additions served agency needs while leaving members of the public to search – often in vain – for what they needed. Looking at the old Department Home Page, as shown in Figure 1, consumers could not determine how to navigate to their needed information, or even where to look on the home page.


Figure 1: Department's Old Home Page

The busy home page included a lot of links to a lot of topics. With so much content vying for attention, consumers got confused. No tools for content management had been integrated into the design. Content additions or updates had to be coded based on the availability of a limited staff of developers, rather than being refreshed regularly and when needed by the Department's program offices. In addition, when transacting business with the Department, consumers were required to download forms to complete and mail a check to the Department, rather than completing a transaction online. Finally, content was static. Data and tables were provided through pdfs or were hard coded, making it difficult for consumers to determine the timeliness of the data.

Solution

To meet the needs of its consumers, DOH launched a redesigned home page as shown in Figure 2, and Healthy New Jersey 2020 website as shown in Figure 3 in June 2014.

Figure 2: Department's New Home Page
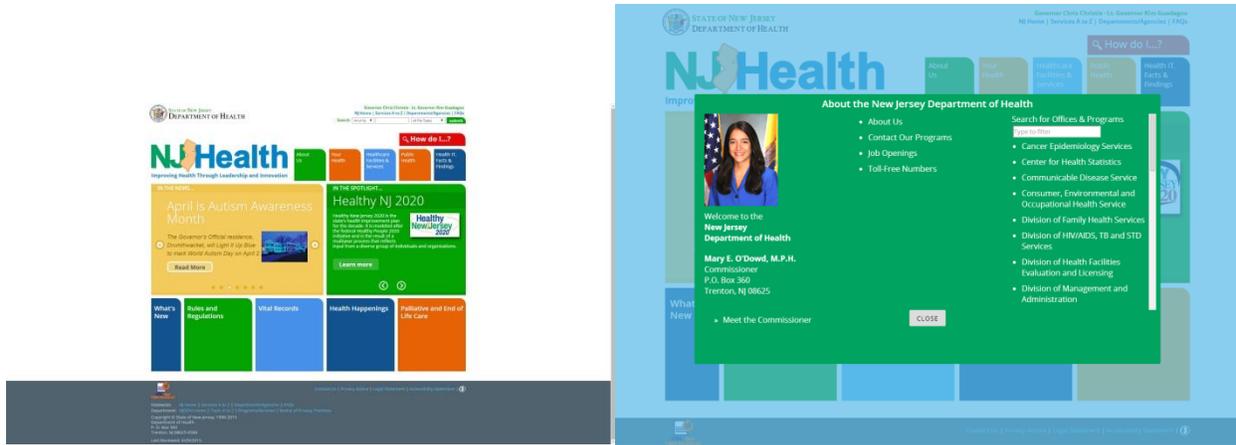
In modernizing its internet presence, the Department made major changes to its website architecture, design, information presentation, and content management process. After designing the new Department home page and Healthy New Jersey 2020 website, DOH worked collaboratively with its partners in OIT to ensure that the design adhered to State standards and that it could utilize the State's enterprise solution – Team Site – for development.

Figure 3: Department's New Healthy New Jersey 2020 Website
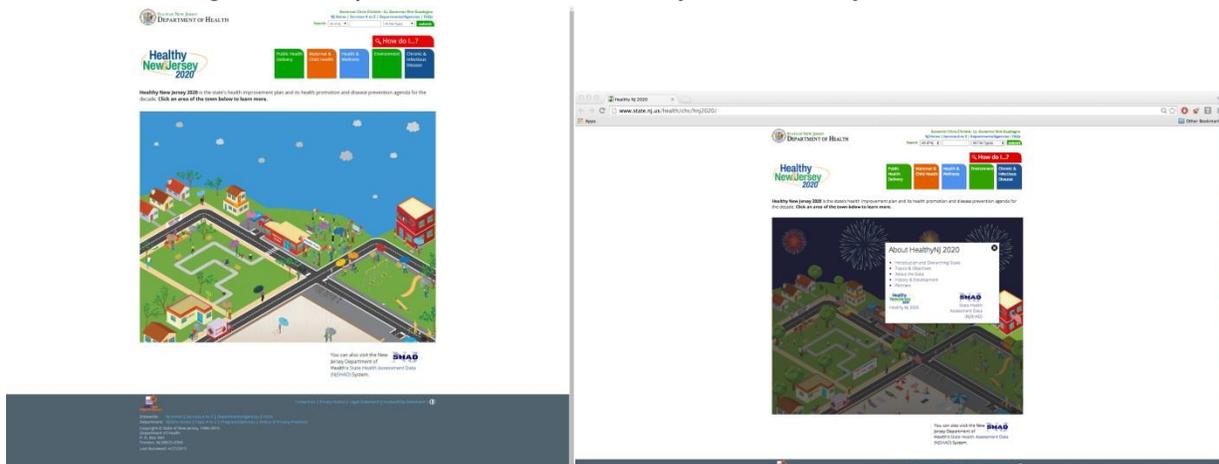
- **Interactive and Dynamic Capabilities:** The site enabled interactive and dynamic reporting, manipulation, and visualization of data since the Department has a wealth of data that can be shared for the benefit of researchers, policy makers, the public, and other stakeholders. The ultimate goal is to help drive improvements in public health as shown in Figure 4.

Figure 4: Department's New Interactive and Dynamic Reporting and Visualization of Data
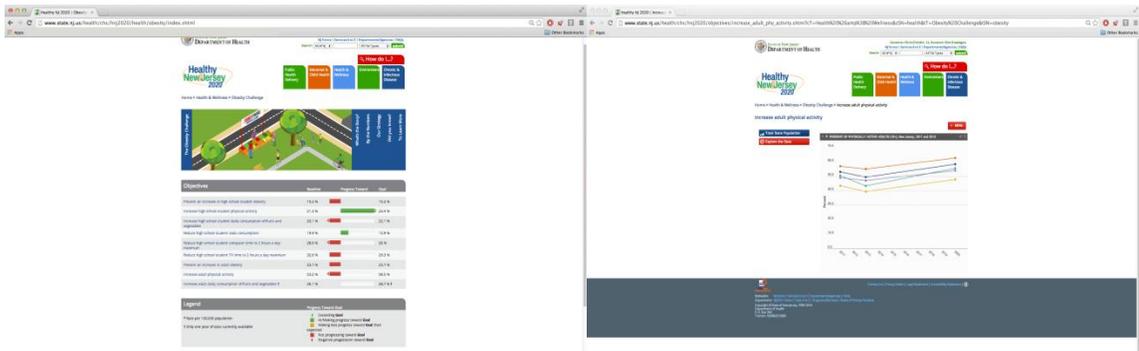
- **Search Capability:** The update added robust and easy-to-use search capability that took advantage of the modernization of the Department's content architecture. The new capability also made it easy to access content, including search, from any path.

- **Content Management:** The content management system allows DOH to plan and design with the needs of consumers driving decisions. DOH's content owners can manipulate, update, and manage their own content, allowing them to refresh and continually update. This is designed to prevent stale content on forgotten web pages. Full-scale deployments are not required for content updates.

- **eGovernment:** The system automated paper-based processes to expedite consumer interactions with the Department and provide consumers with better service as shown in Figure 5.

Figure 5: eGovernment

Significance to the Improvements of the Operation of Government

With the Web Modernization project, DOH invested in open government and open data. DOH took advantage of modern design and technologies to reach out to consumers and address their needs when interacting with the Department online. In doing so, DOH became more transparent and better engaged with consumers. Additionally, DOH is now offering its programs and services in a more dynamic, interactive way by:

- Increasing convenience and speed in obtaining information or services.
- Reducing costs in providing programs and information about the DOH's services.
- Reducing the amount of paperwork
- Expanding the possibilities for reaching new sectors of the community.

Benefits of the Project (Financial and Non-Financial)

The New Jersey Department of Health Web Modernization has had an immediate impact on the Department's stakeholders. The following benefits have already been realized:
- Greater functionality and clear navigation so users are able to find information faster.
- One web approach with responsive web design that ensures DOH's site works on the smartphones and tablets of today and is future-proofed for the unimagined screens of tomorrow.
- Optimized performance with single server call on the Department's home page so users do not have to wait for pages to load.
- Public data (that is not subject to valid privacy, security or privilege limitations) made available in an interactive and dynamic reporting environment that includes visualization and the ability to manipulate.

- Transitioned 173 consumer interactions generating more than $12 million in annual revenue from paper processes and physical checks to eGovernment, improving customer interactions and the Department's business processes.
- Provided tools to continually refresh content so that it is current, relevant and responsive to consumer needs.
- The old site had 5,234 web pages. Outdated content was eliminated. In one program area alone, DOH eliminated 66 percent of outdated content, reducing the number of web pages from 83 to 29.