

Modernizing Tennessee's Digital Experience

October 2016 – December 2017

NASCIO Award Category: Enterprise IT Management Initiatives

Submitting State: State of Tennessee

Contact: Addy Newsom, Project Coordinator CIO Office

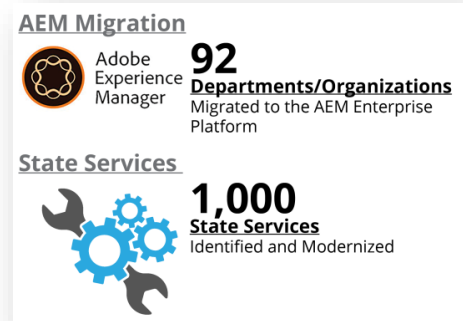


Strategic
Technology Solutions

Executive Summary

In 2016, it was determined that the State of Tennessee's current Content Management Solution (CMS) did not support growth and interactivity. Strategic Technology Solutions (STS) engaged Adobe and the Adobe Experience Manager (AEM) to provide the platform to modernize the digital experience and advance the development of the CMS. STS is now able to provide a constant improvement model to its' customers. The project, completed in 2017, proved to help the state incorporate new innovations and provided ease of use for both state employees and citizen users.

STS worked with over 92 different departments and organizations across all government branches to help ensure the migration to the new AEM enterprise platform was as seamless as possible. STS also worked to identify, modernize, and bring to light over 1,000 state services, which were previously hidden under convoluted department sites and subpages.



Also during this time period, STS and partnering departments worked to overhaul an internal website TeamTN.gov. This site was also migrated in AEM and is used for employee-only relations. As a result, the state has a fully-functional internal website, where employees can see the latest news from the Governor, Governor Awards, Human Resources announcements, inclement weather announcements, employee discounts, state employee news, and state accomplishments, which were previously unseen. This CMS site now includes over 106 different departments, with new adopters added each month.

Concept

The original problem with the internal and external websites (TeamTN.Gov and TN.Gov) was the lack of standards built into the past product preventing its ability to perform with consistency and facilitate the creative needs of the departments in which the website supported. Other concerns were the ease of use for citizens, how the citizen utilized the website, and what needs they were trying to meet through the external website. There were additional concerns with the internal website and how state employees navigated to their employee center, and pain points in finding information.



The content management solution (CMS) for the internal and external websites (TeamTN.gov and TN.gov) had lack of standards and was .html based.

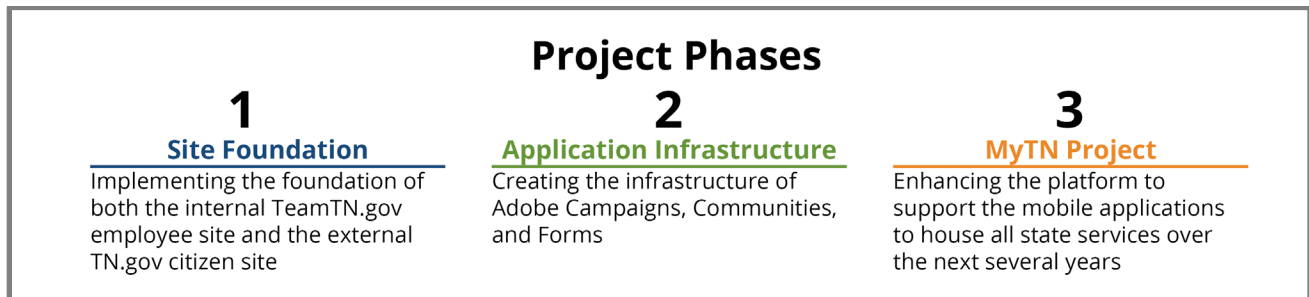
The previous solution was .html based and not well- suited for the internal environment. The solution could not handle the user load or the creative configurations necessary to design a site that resembled a traditional state website.

Foundational Elements

The foundational elements within the project were teamwork and open communication. The platform is front-facing for the state and frequently undergoes scrutiny from media, attacks from hackers, and constant micro projects running in parallel. The additional support from the state Public Information Officers (PIO) and Governor’s Office made this project successful, as they were the voice for keeping the standards in place and the components simple enough for non-technical users to implement independently.

Project Phases

There were several phases of the project; stage one involved implementing the foundation of both the internal TeamTN.Gov employee site and the external TN.Gov site. The second phase was the implementation application infrastructure for Adobe Campaigns, Community’s and Forms infrastructure. The third phase was the MyTN project, which involved enhancing the platform to support the mobile applications to house all state services over the coming years.



Numerous micro projects ran in parallel to the main efforts: TransparentTN website revamp and launch, COT.TN.gov- both internal and external sites launched, third party branded PickTNProducts with mobile application development and launch, integrations to external ServiceNow for both case management and chat system to support both sites, and Single Sign on integrations.

Agile Methodology

The agile methodology was used for the implementation of the product and any enhancements to the platform. Using the agile framework for project building and implementing, the communication flow has been improved. As a result, a product review was provided for the customer prior to completion, and a faster, more robust approach to releases into the platform for customer utilization was delivered. This has, in turn, mandated certain process flows and cut-off dates for developers and team members. Rollout was gradual as the team on-boarded new products, new sites, new enhancements, and fixes. The agile approach was applied to all issues and worked into a set deployment and release

schedule. Factors influencing prioritization of work included security evaluations throughout the process, as well as finding ways to improve performance for the customer/citizen.

Project Governance and Involvement

The Portal Advisory Committee and its supporters provided well-defined project governance. The project also benefitted from shared ownership with the Governor's Office and provide authority to ensure consistency and process involvement from all departments. The IT governance was based on pre-existing process flows within the organization. Project management and project tasks were documented and reviewed with stakeholders weekly, monthly, and quarterly depending on the committee and audience.

Executive Management within STS was involved, as well as executive leadership from the Governor's Office. STS Executive Management was utilized to help keep the project moving and remove obstacles that might impede progress. The Governor's Office helped organize and facilitate standards. This gave the platform a unified front for the customers/citizens.

The core team was comprised mostly of state staff:

- Two Java developers
- One QA/testing developer
- One analytic developer
- One infrastructure developer
- Two UX/UI developers
- One manager

Supporting staff from outside the core team:

- Communications consultant
- Architect consultant
- Director

Outside the core team helped to ensure the environment was working and stable

- Middleware
- Networking
- Customer Focused Government
- Server Support

Strategy Formulation & Communication Within and Across Teams

Communication was a critical factor for project success. The main development team attended daily stand up meetings, weekly reports were given to executive staff, weekly status meetings were held among management, and monthly reports for various committees and for the Governor's staff were created.

Communication strategies have a standard process flow for any of the projects for the team running the platform. There is governance in place through one main committee, which is chaired by the state's Chief Operating Officer. There are also several smaller committees for specified areas of the strategy, such as branding standards, policy, and innovation. The Governor's communication office plays a key role when any announcements are sent to the media, and orchestrating the message throughout all department communication streams, such as: social media, advertising, press releases, in person announcements, videos, and print publications A communication plan is created between the major stakeholders, and then a marketing plan is created for implementation of the message. When there

are communications to the internal employee base, the same message governance is utilized. These messages are distributed to IT groups, communication groups, web groups, and project management groups. Information is shared, posted, and reinforced by departmental newsletters, platform news updates, collaborative workshop, etc.

Significance

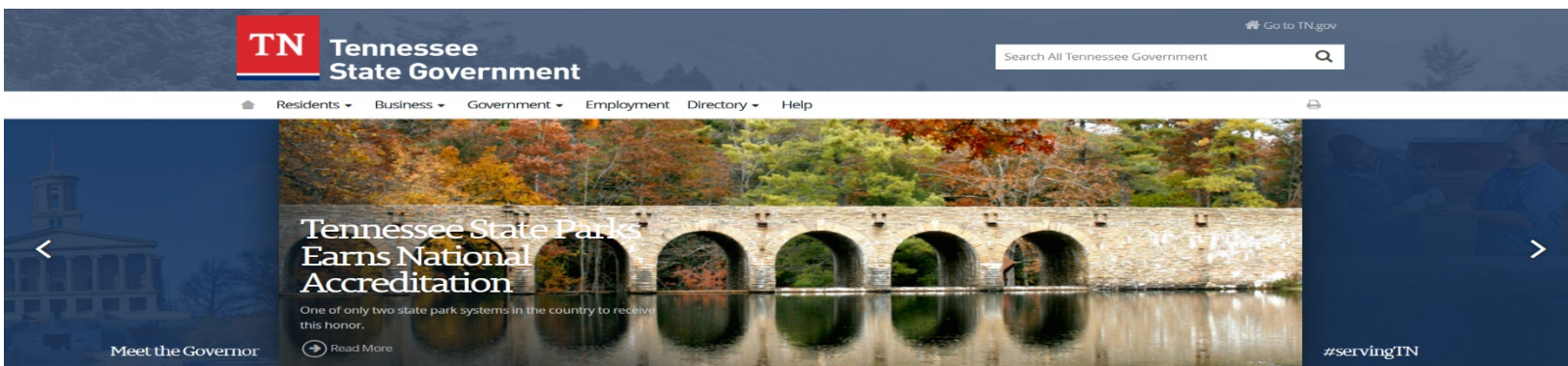
The scope of the project was to find and develop a content management system which would support growth and interactivity, while also providing the most user-friendly interface and experience. Maintaining the project scope was challenging and it was also critical that the vision was understood and the priorities were set among the parallel projects.

The manageability of what was being delivered and communicated to the customer/citizen was the most important goal of the project.

The state wanted a unified approach to how the citizen engaged with the state. The citizen population expressed their dissatisfaction with the ease of finding state-provided services and understanding what is purchased with tax dollars. The state of Tennessee wanted to provide a better level of transparency for information, as well as an efficient way to control the message and delivery. Secondly, the state and its resources needed the ability to expand the platform to support customer/citizen future needs.

A Unified Approach on How the Citizen Engages with the State




- Provide a better level of transparency for information, as well as an efficient way to control the message and delivery
- Help ensure the state and its resources could support and expand to future customer/citizen needs



The AEM platform was selected because of its ability to expand the platform for future needs and keep up with changing technology trends. As the original environment was being built, expansion was taking place. Sites outside the standard branding with third party branded sites were added, as well as other functionalities such as: Campaigns, Communities, and Forms.

The infographic features the Adobe Experience Manager logo on the left. To its right is a descriptive sentence: "Adobe Experience Manager (AEM) is a comprehensive management solution for building websites, mobile apps and forms. AEM makes it easy to manage your content and assets." Below this, three colored boxes represent different features: a red box for Campaigns, an orange box for Communities, and a green box for Forms. Each box includes an icon, a title, a subtitle, and a brief description of the feature's capabilities.

Adobe Experience Manager | **Adobe Experience Manager (AEM)** is a comprehensive management solution for building websites, mobile apps and forms. **AEM** makes it easy to manage your content and assets.

 AEM CAMPAIGNS Customize Communication	 AEM COMMUNITIES Maintain Collaboration Spaces	 AEM FORMS Build and Design Forms Easily
AEM Campaigns allows users to send email campaigns, newsletters, alerts, and messages to user lists. Campaigns include email templates that are easily customizable. Analytics provide metrics on bounce, sharing and open rates of emails.	AEM Communities allows users to create and maintain collaboration spaces for state-wide groups, such as blogs and forums. A social space for idea sharing and interactions.	AEM Forms allow users to easily build and design forms such as "Contact Us" for website and mobile application use. Users will be able to utilize analytics to effectively measure form usage.

The methodology utilized for identifying the highest impact areas for the project was normally based on the severity of the impact to the customer/citizen. This would then be followed by items with the highest impact to development times and releases, and then lastly moving to fun or creative enhancements to the system. Security evaluations throughout the process played an important part in setting priorities, as did finding ways to improve performance for the customer/citizen. All requests would be noted in an agile format, and discussed with every sprint release schedule. As a result of that discussion, a plan for accomplishment would be developed.

Impact

The project's main impacts have been in the efficiencies the departments have been able to achieve through the platform in their content building of communications to the customer/citizens. It was estimated that an average of \$1.2 million in savings was achieved with all management staff able to save one hour of work a week by utilizing the system to promote, inform, and build content. Prior to implementation all content had to be sent to an IT webmaster. This required a great deal of communication back and forth between the IT webmaster and the customer regarding the request, and then proofs needed to be created, viewed, and approved before posting. Training now takes places via routinely held workshops where the department interacts with their customers directly and provides assistance where needed.

The ease of use for the users was anticipated but not to the current level. Prior to implementation, there were over 200 requests per day for support. Now there are 20 requests per week, and currently there are far more customers than ever before editing content and creating websites. There is more flexibility with the component building and the diversity of design within the platform. The customers are able to use the components without coding, which is different from the previous version, and has made them extremely happy.

