WHITE PAPER

ENHANCING
EMPLOYEE ENGAGEMENT WITH
LEADING EDGE CMS

Snapshot of Objectives

A solution for targeted outreach to widely dispersed employees.

Inherent flexibility to accommodate different types of messaging.

Ability to adapt to changes in data formats and service availability.

Completion of Proof of Concept within a 2-3 week timeframe.

Avoidance of major capital expenditures due to lengthy procurement processes.

Ability to manage the platform internally.

The TVA's existing Intranet had been in place for years, and it was not accommodating current needs like mobile functionality, lack of content strategy, absence of analytical data, and managing the content was cumbersome.

Client: The Tennessee Valley Authority

The Tennessee Valley Authority was created in 1933 as a massive undertaking in the midst of the Great Depression.

Nearly nine decades after this signature New Deal initiative lifted up an economically strapped region, the TVA now stands as the largest public power utility in the United States, serving more than 9 million customers in seven Southeastern states. Throughout its history, the TVA has continuously adapted to the times -- never wavering from its original mission of economic development, energy production, and environmental stewardship.

Background

The Tennessee Valley Authority's Digital and Creative Services team sought a solution for enhancing engagement among 10,000 employees deployed at 73 facilities, which include seven coal-powered plants, three nuclear plants, 29 hydro plants, nine natural gas combustion turbine plants, 15 solar energy sites, and one wind energy site.

Problem Statement

The TVA's existing Intranet had been in place for years, and it was not accommodating current needs. Mobile functionality was lacking, and the content was too often stale or duplicated due to a lack of a coherent content strategy for the site. The outdated platform did not allow for any analytical data and content management was a cumbersome process.

Adding to the communications challenges was the fact that a high percentage of employees tended to be out in the field or on the floor of a plant and not at a desk or with access to a computer with any degree of consistency. Also at issue was the fact that messaging needs varied widely among employees in different functions and that the relative messaging importance ran the gamut from urgent updates to routine announcements.

Adept at leveraging technology to optimize communication with constituents, including employees, customers, local power companies, and state and local governments, the TVA's Digital and Creative Services team had high expectations and was open to leading-edge solutions.

PROJECT REQUIREMENTS

Key Requirements

A robust digital infrastructure that could cover a wide variety of use cases and adapt to changes in data format and service availability.

Automatic content import capabilities via a web-based application that could pull in and display both internal and external content.

Ability to assemble various pieces of content and display items on one page.

No new hardware, due to a need to avoid a time-consuming procurement process.

Low or no-cost software, due to the same need to avoid lengthy procurement process.

Flexible content management options: Assurance that the system could be operated remotely by multiple users at various locations with different levels of access.

Aggressive timeline: 2-3 weeks for development of the Minimum Viable Product (MVP) Self sufficiency in managing the platform.

Keys to a successful implementation required -

- ◦ Use of decoupled Drupal to power digital signage, deploying a hybrid approach via Panels and AngularJS. Systems integration for data/content from other TVA systems via REST API with JSON.
- ◦ Deployment of Drupal Panels drag-and-drop content manager module, which allowed for customized layouts for multiple uses.
- ◦ Leveraging of existing mini-Dell PC's as displays, which meant saved both time and money by eliminating lengthy procurement processes associated with purchasing new devices.
- ◦ High level of technical consulting, training and deployment support.
- ◦ Assurance of a scalable solution that can be built upon as needed.

Paramount's Strengths

The project was awarded to Paramount Software Solutions through an RFP process, where the below factors were the parameters of the selection -

- • Technical capabilities with experienced resources
- • Client references
- • Proposed budget and timeline

PROJECT EXECUTION

Project Location : Chattanooga, TN

The client required the entire Paramount development team to be onsite as TVA is a Federal utility agency and security is very strict. It required an extensive background check for all Paramount resources. This requirement worked out to be an advantage with having the entire team onsite since they all worked together with the client team in the same project room and access to client was easy to be able to coordinate better, and understand needs more in depth..

PROJECT DESCRIPTION

TVA has always been a traditional internal hosting and Microsoft shop for existing intranet/extranet sites (> 1,300 sites). The client had been utliizing traditional CMS/MS SharePoint .NET platform frameworks. The customer was challenged by upper management to lower infrastructure cost by looking to the Drupal 8 CMS platform to refactor most all of it's legacy websites while utilizing MS Azure Cloud Services (PaaS) for Drupal 8, Active Directory and MySQL. This project was specific to the intranet redesign project (named "InsideNet").

Success Factors

The TVA's Intranet "InsideNet" was redesigned through the development of a functional digital signage MVP that leveraged Drupal 8 to manage and display targeted messaging.

The team functioned as –

- Technical Lead
- Drupal Architect
- Frontend and Backend Drupal Developer
- Trainer – for TVA staff on the site management and functionality.

Challenges
- The client has always been a traditional Microsoft shop, and their IT operations/infrastructure team were not familiar with LAMP stacks so there was a large learning curve for the TVA team.
- The client development team have mostly been experienced with the MS .NET/Sharepoint platform – we conducted training to the client team but it takes time for a developers to learn a new stack/language.

# PROJECT EXECUTION [cont.]

TIMELY DELIVERY

TVA was extremely satisfied with target timelines that were obtained by Paramount development team. Despite challenges faced by the execution teams including integration (Azure, Active Directory in this case), with the new Drupal intranet site as the client never integrated to an open source platform based on linux/phpext, the timely delivery was not compromised. This was done by tracking all issues in JIRA and shared with TVA client, and resolutions were identified. Daily scrum standups allowed all teams to prioritize and resolve issues as they came up, thus managing the time well.

COST CONTROL

Since controlling costs was essential to the client, the Paramount team worked closely with the TVA program manager and contract officer to keep project within scope/budget. Paramount conducted daily scrum meetings and weekly PMO meetings with the TVA team to review timeline, budget, and scope

Continuous collaboration and communication with the client helped in identifying the areas that were a priority, and finding the best yet affordable resources - *talent and technology-* to be able to deliver the desired results.
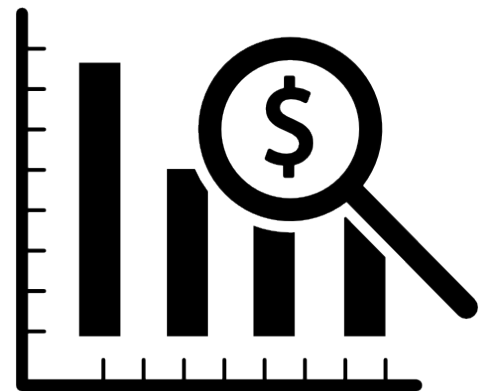
CONCLUSION

Paramount team has been and still is an integral part of the TVA development team for releases/enhancements to the MVP. According to the client, Paramount team has demonstrated excellent customer service in regards to keeping up with the executive/management staff at TVA to understand the business problems and come up with viable solutions.