

Reengineering a Large-Scale Public Sector Website for Accessibility, Governance, and Digital Service Delivery

Client Overview

The client is a large county government serving nearly one million residents, along with businesses, students, families, staff, community stakeholders, and visitors.

The County delivers public safety, transportation, parks and recreation, family services, and other civic services across **more than 20 major departments and offices**.

Its website serves as the primary public-facing digital platform for accessing information and interacting with digital services. Residents use the platform to locate resources, access services, and engage with County departments.

The environment operated on Liferay DXP 7.4 and included more than 100 web applications developed as Liferay portlets using Java J2EE technologies. The platform also supported existing external user registration within the Liferay framework.

The County required structural improvements while preserving operational continuity.



Case Summary

Requirement: Modernize a Liferay DXP 7.4-based county website serving nearly one million residents while preserving 100+ existing portlet applications and enforcing ADA/WCAG compliance.

Approach: Configured structured publishing workflows, centralized role-based governance, and migrated 400,000 user accounts and 1,600+ content assets within an on-premises environment.

Outcome: Established standardized CMS governance, responsive architecture, and accessibility compliance without backend application modification.

Why the Project Was Initiated

The existing website presented structural and governance limitations. Accessibility compliance under ADA/WCAG standards required formal enforcement within the platform. Navigation and visual structure required redesign to improve clarity and consistency.

Publishing processes lacked standardized workflow enforcement across departments. The County required the incorporation of up to **three publishing approval workflows** within Liferay CMS.

The platform also included more than **100 existing portlet-based applications** that required preservation without backend modification.

The engagement required modernization within an existing Liferay environment, preservation of application infrastructure, and implementation of structured governance controls.



Engagement Structure

The project progressed over **15 months** through six defined phases:



Planning and Discovery



Design



Development and Configuration



Content Migration and Quality Assurance



Deployment and Launch



Post-Launch Review

UX and information architecture progressed alongside CMS configuration, while content migration occurred in coordination with template and workflow implementation.

Formal stakeholder approvals and governance checkpoints determined phase transitions.

Tech Stack

The platform environment included:

- **Liferay DXP 7.4**
- Java J2EE-based Liferay portlet applications
- On-premises hosting environment
- Liferay-based external user registration and authentication
- HTML5, CSS3, and JavaScript for responsive front-end implementation

The solution retained the existing application infrastructure while configuring governance and accessibility controls within the CMS framework.

Solution Architecture

The project retained Liferay DXP 7.4 and operated within the County's existing on-premises infrastructure.

Implementation included:

- Configuration of up to three publishing approval workflows within Liferay CMS
- Role-based authoring and permissions management
- Version control and audit capabilities
- Migration of approximately **400,000 existing user accounts**
- Migration of approximately **1,600 pages and 6,000 news and story items**
- Responsive front-end implementation using standardized components
- Accessibility standards incorporated within reusable design components
- Structured SEO configuration, including clean URLs and metadata

The engagement preserved the existing portlet-based application framework while implementing defined enhancements within the platform.

The solution centralized CMS governance while maintaining departmental publishing ownership across more than 20 departments.



Outcomes

Following the launch, the County established:

- ADA/WCAG 2.1 Level AA compliance
- Mobile-responsive platform architecture
- Standardized publishing workflows
- Centralized role-based governance within Liferay CMS
- Migrated user accounts within the existing authentication structure
- Consistent visual design standards applicable to County-managed sites

The County retained its existing application infrastructure and implemented structured governance and accessibility controls.



About Paramount Software Solutions

Paramount Software Solutions delivers structured digital platform initiatives within defined regulatory and operational constraints.

The firm specializes in CMS governance implementation, authentication integration, structured content migration, and disciplined public-sector execution.

Paramount maintains internal Centers of Excellence, including an **AI Centre of Excellence**, focused on applied automation and scalable modernization frameworks where applicable.

Across engagements, Paramount delivers **structured platforms within established compliance, security, and governance requirements.**

Paramount's Perspective

This engagement required coordinated execution across accessibility compliance, content migration, workflow configuration, and identity integration.

The project included the migration of approximately 400,000 user accounts and 1,600 pages, along with 6,000 content items from the legacy environment.

Implementation incorporated workflow configuration within Liferay CMS, enforcement of role-based access controls, and structured accessibility validation during development. The County preserved more than 100 existing portlet-based web applications while implementing defined enhancements within the platform framework.

The engagement required modernization within established architectural boundaries while maintaining operational continuity.

Let's Talk!

If you are responsible for restructuring a high-volume public-facing digital platform while preserving operational continuity, Paramount Software Solutions delivers structured CMS and governance initiatives within defined architectural parameters.

To discuss a similar initiative, contact:

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