



**State of Vermont
Enterprise Content Management System (CMS)**

**Nomination for NASCIO's 2008 Recognition Awards for
Outstanding Achievement in *Data, Information and Knowledge Management***

**Submitted by Harry Bell
Director of Web Services, Office of the CIO
State of Vermont
June 3, 2008**

B. Executive Summary (one page in length)

In August 2007, the State of Vermont took a major step in its multi-year commitment to its citizens, businesses, and governmental agencies by deploying an Enterprise Content Management System (CMS). The challenge was clear – offer a simple-to-use system affordably to encourage wide adoption among state employees. Among the primary goals of the CMS is to assist state government employees—those who own and maintain content critical to the state’s customers— in streamlining the creation and maintenance of their respective websites. In addition, the implementation of the system has multiple aims, including:

- To allow state agencies and departments the ability to create independent websites at no upfront cost
- To guide and train non-technical staff in learning how to add content to these websites
- To make more uniform a common look and feel standard for the state
- To ensure the security and accessibility of state websites
- To make it easier for citizens, businesses, and others to find what they need in Vermont state government

The Content Management System in Vermont was launched only after careful planning and research by the state. A robust CMS that would simplify the adoption of a common look and feel standard has been a primary vision of the State CIO and others as a potential solution to the siloization of Vermont state government, and the tool that was created built in several features which would make this vision a reality. Versed in state and ADA standards and with a strong focus on Internet security, the team that was tapped to create the CMS was also designated as the primary designer and trainer for state agencies, and were thus able to deliver a consistent message and platform to meet the state’s needs.

In total, 4 new websites have been launched in the new Content Management System since it was introduced, and at least 10 more are planned to go live by the end of 2008. In order to respond to the changing needs of the state, the system was built to be both dynamic and flexible. Upgrades in both functionality and usability are made regularly, allowing for further innovations in the future.

C. Description of the business problem and solution, including length of time in operation.

Since the early 1990's, the State of Vermont has built hundreds of websites for the agencies, departments and branches that make up Vermont state government. Created by individual personnel within each department, these websites have represented well the unique traits of their organization, but rarely communicated well with other departments, or the state as a whole. Inconsistencies in the naming of official state websites, URL conventions, navigation, and searchability, as well as different levels of technological expertise resulted in great disparity from site to site, creating an often confusing patchwork that contributed to the misperception that state government was not well-connected to its citizens.

As a result of this disconnection, the State of Vermont has been consistently ranked among the lowest nationally in providing state government content and services online over the last half decade, a distinction the state obviously aimed to change under the leadership of its CIO since 2006, Thomas Murray.

In late 2006, the State of Vermont entered into a long-term contract with Vermont Information Consortium (VIC) and announced plans to (1) launch a new state portal, (2) deliver new and innovative online services to the citizens and businesses who interact with Vermont over the web, and (3) provide a content management system that would provide a common look-and-feel for state government. The CMS to be built would be guided by recently-written state standards to be mandated across all state websites and would allow employees of all technological backgrounds and abilities to populate and update their sites easily, and with minimal training. No hardware or software is required for state employees – the CMS is a browser-based tool available anywhere an Internet connection is available. The CMS would be funded through the creation of additional online services that VIC would develop through their unique self-funded model.

Work on the CMS began in earnest at the beginning of 2007. Monthly state webmaster meetings were held to identify the various needs of different state departments, as well as to identify which of these departments should be considered for early adoption of the CMS. By summer, over 20 departments had come forward, and information gathering meetings among the State, VIC and key members of each department were set up to determine timelines and other details. A CMS prep checklist was put together to help individual agencies prepare for redesign, and a list generated to determine project queue. With such enthusiasm for the new website development solution, rigor in project management was needed and therefore individual plans were built in MS Project to determine tasks, roles and milestone dates to ensure success through the process.

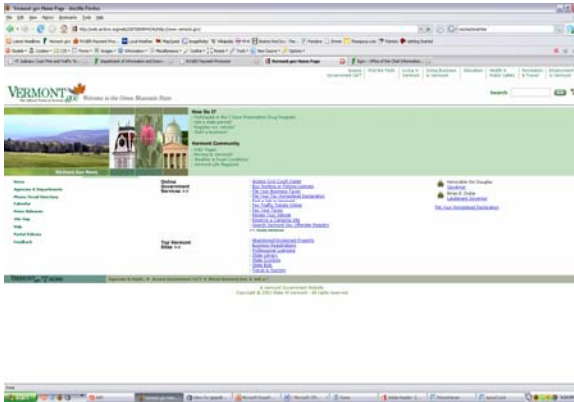
Officially launched in August, the ease of use and popularity of the CMS in Vermont was immediately apparent. By October, the state had launched two (2) brand new public websites, and by year's end ten (10) individual state departments had begun active work on site redesigns. In the first four months of 2008, two additional department websites have been

launched, and several more have been added to the queue, including two very large public sites (the Vermont Department of Motor Vehicles and the Department for Children and Families).

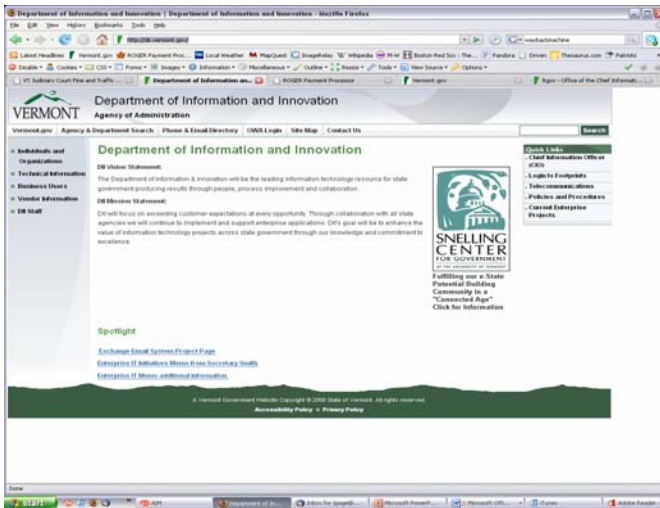
Further work with state agencies has revealed both the strengths and the needed enhancements of the CMS. As each new site is launched in the CMS, additional features will be identified and/or added to the system in order to grow its user base, update websites and services, and save time and money for Vermont and its citizens.

The Content Management System has enabled the state to streamline its common look-and-feel.

**Inconsistent designs like these:*



...will begin to look more uniform, like these:



D. Significance to the improvement of the operation of government

Organizational

Use of the CMS is a far more complex process than simply migrating existing content to a new system. Pages must be reviewed for content and relevance, information architecture must be reworked, stakeholders must be identified, and forms must be created. The Office of the CIO, in partnership with VIC, helps state agencies through this process as they take inventory of their existing web presence, catalogue its strengths and weaknesses, and chart a strong Internet presence for the future. Forced to take a look at the individual pieces of their websites, they are better able to organize their content, target different user groups, and present a cohesive picture of their agency so that users are better able to navigate through the site to find the information they need. The online CMS manual also helps guide state personnel to find answers to common questions and is available anytime.

Collaboration & Centralization

The implementation of the CMS in Vermont is a collaborative process that unites state agencies with the Office of the CIO and VIC to help guide agencies with site redesigns. By utilizing a state-centralized system to help them create and update their websites, agency employees take advantage of the enterprise tools available within the system, and the multiple features it offers. The close collaboration between state agency personnel and the Office of the CIO also allows state agencies to learn more about additional online service opportunities that can be built by VIC and which can deliver significant value to the agency and the citizens of the state.

Human Resources

The CMS is a valuable tool for human resources because it empowers non-technical employees to learn more about managing their own websites, while simultaneously freeing up IT personnel who are overburdened with these administrative duties. IT personnel are then more available to rededicate their efforts toward other, more technical tasks. Already in Vermont, dozens of non-technical employees throughout state government have been able to create content and update their websites easily and efficiently with limited training, thus making them more valuable to their departments, and to the state as a whole.

Innovation, Flexibility, and Speed

Because the CMS is dynamic, it is also an iterative process – each new agency brings its own unique needs to site redesigns. As a result, the CMS is constantly being updated, driven by innovations which are the result of agency needs that become enterprise features to benefit all state agencies. And because the state doesn't mandate (but strongly encourages) use of the VIC team, agencies can also pay outside vendors for design, which may be appropriate for high profile agencies developing collaterals and other branding materials. Once a site is launched and personnel trained, the agency gains the ability to update content quickly, and at their own speed. Taken together, these factors allow state agencies to develop more comprehensive websites with the features and services appropriate to them.

E. Benefit of the Project - In this section please address the financial and non-financial reasons why this project was worthy of the investment made.

Cost

A key consideration for Vermont government agencies considering a site redesign with VIC in the CMS is cost. Because of the unique self-funded model employed by VIC, agencies are able to tap the CMS resource with no capital outlay, and training and ongoing customer support is also free through the system. By contrast, similar commercial software solutions for content management can run easily into six figures, which does not include individual agency licensing fees and support costs, etc. In Vermont and around the country state budgets are shrinking and hard financial times are evident everywhere, making the CMS solution that Vermont has chosen financially sensible. The result is substantial cost savings in dollars, hours, and other resources to Vermont state government and the citizens it represents.

Control

Another core benefit of the CMS is control, especially by state personnel. Whereas currently only a few staff members in a given agency have access to edit and update their individual websites, the CMS allows any staff member who has access rights the ability to do so. And different personnel can be given different access levels, from author to editor to points in between, ensuring more direct involvement by state employees, with the added benefit of hierarchical controls. In addition, flexible and tailored workflows are built into the system so that new pages can undergo automatic review prior to publishing.

Usability

Perhaps the most significant public benefit of the CMS which cannot be overlooked is usability. Primary navigation, header and footer images, a common banner and state logo that appear in the same place on all pages will ensure that users are able to quickly access the information they are seeking—the main aim of government websites. Commonality across these fields will also ensure that users know they are on a state government website, a situation that does not currently exist in Vermont.

Security

Additionally, by using the CMS the state will experience significant benefits in terms of security and uptime. The actual server hosting the CMS sites is housed in Virginia in a secure location with advanced site and electronic security. Available 24/7 and outfitted with redundant power sources, the facility is more secure than any that currently exists in the State of Vermont. Further, any agency who works with VIC to develop a fee-based application will be protected by the most stringent regulations of the payment card industry, as well as other advanced security features.