



Waterloo CMS Project

Project Charter

Information Systems and Technology (IST)
University of Waterloo (UW) – Waterloo, Ontario, Canada

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Introduction

Drupal (<http://drupal.org/>) has been identified as the Web Content Management System (WCMS) for UW. The Waterloo CMS Project is a technology-implementation project to implement Drupal as the centrally supported website creation and maintenance tool at UW.

Background

The current centrally supported tools for website creation and maintenance at UW are Adobe Dreamweaver and Contribute. UW Common Look and Feel (CLF) templates are distributed as Dreamweaver templates along with instructions about how to customize the templates for specific websites. Cascading Style Sheets (CSS) are also used to define the layout and presentation of web pages. Together, the Dreamweaver templates and CSS provide a relatively easy way to create UW websites that comply with the CLF. While the manipulation or modification of the templates requires knowledge of Dreamweaver, maintenance of web pages is simplified for web-content maintainers with the use of Contribute in several areas across UW; a few areas at UW have extended this model by using Contribute Publishing Server to manage access permissions. Some areas at UW are not using the currently supported tools, and have implemented other web technologies (e.g. WordPress or other WCMSs) to manage their websites.

Rationale

The UW Web Advisory Committee (WAC) recommended the replacement of the centrally supported tools for website creation and maintenance with a WCMS. Research conducted by WAC found that a WCMS will address some of the limitations and deficiencies posed by the current website creation and maintenance tools. Some of the areas where a WCMS could provide benefits include: the separation of presentation and navigation from content; ease of website administration and maintenance - particularly of large websites; responsiveness to changing technology environments and requirements; implementation of enhanced or extended

functionality (e.g. forms, photo galleries, feeds, blogs, etc.); and reusability of web content. The WAC report recommending the implementation of a WCMS at UW is titled, “Content Management Systems: Web Advisory Committee Report.” The report provides further details about the benefits of implementing a WCMS, and can be found at the WAC website (<https://strobe.uwaterloo.ca/~twiki/bin/view/WebAdvisory/WebCMS>).

Objective and Scope

Objective

The Waterloo CMS Project will implement Drupal as the centrally supported website creation and maintenance tool at UW. Drupal will replace the current centrally supported website creation and maintenance tools, Adobe Dreamweaver and Contribute.

Scope

Develop a project management plan for the project, including scope, work tasks, budget, schedule and communications plan; establish a project team; conduct a requirements analysis for hardware, software and features; obtain training and support for preliminary implementation, and develop an internal training and support plan for UW end-users; define the system architecture and web information architecture for implementation; implement the system including hardware, software, web development and web design; conduct testing; deploy the system; close out the implementation project to transition into a maintenance phase.

Exclusions

- Integration with vendor supplied systems (e.g. Angel, PeopleSoft HR, Quest, etc.).
- Integration with Document Management Systems (DMSs), Enterprise Content Management Systems (ECMs) and other systems used to capture, store, preserve and deliver content related to organizational business processes.

Work Outline

This section provides a general overview of some of the major work tasks that need to be performed for a successful Drupal implementation project. The project management plan for the project will capture work tasks in further detail as required.

- *Create and implement a project management plan:* Create a project plan to guide and track the project (including scope, work tasks, issues, budget, schedule, risks, milestones, deliverables, reporting, etc.) and to provide project team members with a common vision of the project; implement the project management plan.
- *Establish a project team:* Identify the roles required to implement Drupal; establish a project team with the skills and knowledge required to implement Drupal.
- *Obtain training and support for internal expertise:* Obtain the required training and support to establish internal expertise in Drupal.
- *Develop and implement a communications plan:* Develop a communications plan that includes a strategic communications plan to communicate with the UW community about the project and a project-team communications plan (listing project team members and other key stakeholders, frequency of communication, methods of communication, formality of communication); implement a project collaboration tool for the project team (e.g. SharePoint); conduct project communications.

- *Conduct a requirements analysis*: Identify the hardware and software required to implement Drupal; review the needs assessment information captured in the “Web Content Management Systems: Web Advisory Committee Report” and conduct any required follow-ups to the needs assessment information captured in the WAC report; specify Drupal technical requirements stemming out of the needs assessments.
- *Develop a technology implementation strategy*: Develop a staged or phased implementation strategy that takes into account the dispersed website management structure at UW with a preliminary institutional installation of Drupal by IST followed by distributed adoptions across UW; develop a web content migration strategy as part of the technology implementation strategy.
- *Create a training and support plan for end-users*: create a training and support plan for adoption, implementation and use of Drupal by the UW end-user community.
- *Implement a pilot launch of Drupal*: install and set up Drupal including the required hardware and software; perform required web programming and customization; incorporate the information architecture (e.g. taxononomy) and design templates into Drupal; create and implement a testing plan; launch the pilot.

Project Schedule

A pilot launch is scheduled for September 2010. A more detailed project schedule, including milestones, will be developed and captured in the project management plan.

Human Resource Requirements

The following roles (areas of expertise) have been identified for project success:

- *Accessibility Specialist* (web authoring tools, web-page and website design, legislative requirements): moderate level of commitment for middle to end of implementation.
- *Communications Specialist* (university communications plan, project communications with university community, liaison with UW Web Redesign Project): heavy commitment at planning phase and moderate commitment throughout project.
- *Database Specialist* (administration, design, development): moderate level of commitment for beginning and middle of implementation.
- *Drupal Consultant* (external consultant with expert knowledge of the system architecture and with experience implementing Drupal in similar organizations and for similar size projects): heavy at beginning of implementation and moderate to light during middle to end of implementation.
- *Project Manager* (project planning, tracking and control, and project-team communications): heavy at beginning of project and moderate to heavy throughout project.
- *Requirements Analyst* (technical requirements for hardware and software, technical requirements stemming from business needs and end users): heavy at beginning to middle of implementation and light to moderate at end of implementation.
- *System Architect* (expertise in the structure/architecture of the system, system optimization, system integration, system customization): heavy to moderate throughout implementation.
- *System Administrator* (implementing and running all required hardware and software): very heavy at beginning and middle of implementation and heavy throughout project.

- *Technical Lead (Implementation Specialist)* (experience in leading the technical implementation of enterprise level applications): moderate to heavy throughout project.
- *Tester* (end-user testing by web administrators, web content maintainers, etc.): moderate to heavy at middle to end of implementation.
- *Training and Support Specialist* (training and support plan for end users, technical writing/documentation): heavy during middle to end of implementation.
- *Usability Specialist* (user-interface-design specialist, website usability specialist): moderate commitment during middle to end of implementation.
- *Web Information Architect* (information architecture/taxonomy for implementation in Drupal): high level of commitment during the beginning and middle of implementation.
- *Web Administrator* (generating websites, assigning user roles and permissions): moderate at beginning of implementation and heavy at middle to end of implementation.
- *Web Designer* (implementing university web templates in Drupal): heavy at middle of implementation and light or moderate at end of implementation.
- *Web Developer/Programmer* (knowledge of Application Programming Interface (API), MySQL, PHP, common web languages): moderate level of commitment at beginning of implementation and heavy level of commitment in middle to end of implementation.

Note that each project team member can be responsible for one role or multiple roles, and that more than one person can assume particular roles. It is expected that project involvement will consist of core project team members (with a full-time or two-days-per-week commitment to the project) and internal consultants from across the UW community (e.g. an accessibility consultant from the Office for Persons with Disabilities). Once the project team is established, the organizational structure for the project team will be outlined in the project management plan along with the roles assumed by each team member. Representatives from all of the faculties and from some of the academic support units will participate in the project.

Assumptions, Constraints and Risks

This section outlines assumptions, constraints and risks associated with the implementation of Drupal. The assumptions, constraints and risks will be reviewed at regular intervals during the project to reassess their relevance and impact and to identify any required changes to these items in the project management plan. A risk registry will be developed as part of the project to track the impact and potential occurrence of any risks, and to help outline and implement risk mitigation strategies if or when required.

Assumptions

1. A core dedicated group of full-time staff will be established to implement Drupal.
2. Project team members will have the technical training and support (both internal and external) required to execute the project.
3. External consultants experienced with the implementation of Drupal in similar organisations will be hired to advise on and guide the UW implementation.
4. The project budget will reflect external costs, but will not detail internal costs for personnel and existing hardware and software required for the project.
5. Financial resources will be available for the required hardware and software, for the necessary technical training and support, and for obtaining the project team members required to execute the project.

6. A distributed implementation model will be implemented with a preliminary institutional installation of Drupal by IST followed by distributed adoptions across UW.
7. The suite of templates implemented in Drupal will be those stemming from the UW Web Redesign Project aligning with the new visual identity to promote the UW brand.
8. Collaboration will exist with the UW Web Redesign Project to define the web design - including information architecture (taxonomy) - to be implemented in Drupal, and areas across UW will be consulted about the web information architecture (taxonomy).
9. Collaboration will exist with the Office for Persons with Disabilities regarding legislative requirements for the accessibility of web authoring tools and web pages generated by web authoring tools.
10. Representatives from all of the faculties and some of the academic support units will participate in the project.

Constraints

1. The necessary training and support must be acquired within a limited allotted budget, and the budget for external consultants for the implementation of Drupal is part of the overall training and support budget for the project.
2. The Drupal implementation model must align with the distributed website maintenance model that exists at UW.
3. In accordance with the “Report of the Information Technology Task Force,” the provision and management of the technical infrastructure for Drupal will be the responsibility of IST (after consultation with the relevant local client group(s)).
4. The project team must work with the UW Web Redesign Project to establish timelines for the incorporation of new UW web design into Drupal and to define the web information architecture (e.g. taxonomy) for the UW web space to be implemented in Drupal.
5. The project team will be geographically located in various spaces across UW with some team members in shared or close spaces and others in separate dispersed spaces.
6. The members of the project team will have differing amounts of time available to allocate to the project with differing amounts of responsibilities or work outside of the project.
7. The need for Drupal to comply with provincial legislative requirements for the accessibility of web authoring tools, and the need for the web pages or websites generated using Drupal to comply with provincial legislative requirements for the accessibility of websites.

Risks

1. There may be an inability to acquire all of the internal specialized technical knowledge required to implement the project through training or hiring in a timely, cost-effective manner, and there may be an inability to obtain sufficient external consulting required to implement the project.
2. Additional financial resources may become required for escalating hardware and/or software requirements and for the necessary technical training and support.
3. The large number of organizational units at UW may pose a challenge to the successful UW-wide implementation of Drupal in terms of adoption, timelines and consistent implementation of the technology.
4. There may be a reluctance of areas at UW to adopt Drupal because of already implementing another WCMS, or because of already implementing new templates from the UW Web Redesign Project in Dreaweaver or another WCMS.

5. The schedule for the availability of templates stemming from the UW Web Redesign Project for implementation in Drupal may affect the project schedule.
6. The templates stemming from the UW Web Redesign Project may not be well supported by Drupal if the templates are not created and tested for compliance with Drupal.
7. An inadequate definition of the web information architecture (taxonomy) may limit the effective use of Drupal, requiring revamping, and necessitating the reimplementation of Drupal.
8. A project team that is geographically dispersed across UW may affect team work, communication and collaboration, and impact on project timelines.
9. The availability of project team members to allocate time to the project given other work priorities and responsibilities may impact on the project schedule.
10. The technical capabilities of Drupal may not fully meet UW's web-content-management needs.
11. The Drupal authoring-tool interface may fail to comply with pending provincial legislative requirements for accessibility within necessary timelines.
12. Faculties and academic support units may not provide representatives to participate in the project.