FEASIBILITY STUDY
KNOWLEDGE MANAGEMENT SYSTEM FOR SBCTC

PREPARED BY

FRANK BRASILE
LIBRARY FACULTY
PIERCE COLLEGE

SHIREEN DEBOO
LIBRARY FACULTY
SOUTH SEATTLE COMMUNITY COLLEGE

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1. **EXECUTIVE SUMMARY**

As the next phase of the LSTA project, LMDC officers are looking for ways to highlight the skills and expertise that libraries offer as experts in information behavior, organization, retrieval and management. LMDC officers would like to use LSTA funds to promote and expand the role of the college libraries by using our expertise to build efficiencies that benefit the statewide system. To this end, LMDC executive officers are considering creation of a statewide knowledge management system that organizes documents, audio/video, and other resources which would be searchable and secure, using the information management skills of librarians and libraries.

2. **DESCRIPTION OF PRODUCTS AND SERVICES**

Many organizations are decentralized and rely on a combination of shared drives, intranets, or individuals with areas of expertise. A KMS provides a central location for information that can be easily stored, searched, and retrieved by users. Careful and deliberate architecture of the KMS ensures that information is organized in the most intuitive way for users.

A KMS can provide access to a variety of information in a variety of formats. Each organization determines what information it wants to provide to its users, and by providing different levels of access, administrators, faculty and staff can access the documents relevant to them. In order to provide maximum access to information, a KMS should be web-based, and accessible from on-campus and off-campus.

A KMS can exist on a number of platforms. Web-based collaborative tools such as blogs and wikis allow users to directly contribute knowledge and information. More sophisticated systems that focus on document management can assist with classifying and providing access to specific information. The classification of information is key to delivering information to users. Today’s users expect a Google-like experience and a search box to query the system to deliver relevant results.

A knowledge management system can include information at different levels. At the system level, it could include public documents or data published by SBCTC for use by statewide councils, such as LMDC, the eLearning council, etc. At the college level, it could include annual work
plans and documents, best practices that emerge from individual campus efforts, course documents or enrollment and transfer requirements. Some specific examples include:

- a counselor in Walla Walla helping a student determine what courses transfer to another community college west of the mountains and using the system to inquire about the specific requirements at another campus
- a developmental English instructor looking for instruction modules that might have been shared by another instructor elsewhere
- a student services administrator wondering what kinds of policies have been established regarding plagiarism and being able to search for such policies.
- an eLearning director looking for completion rates for students enrolled in online English 101 courses
- a financial aid director looking for the most recently passed legislation in the RCW
- a library director looking for a specific document about accreditation from the Northwest Commission on Colleges and Universities.

3. TECHNOLOGY CONSIDERATIONS

Launching a KMS will require either the customization of an existing “off the shelf” product or the creation of an in–house tool built specifically for the CTC system. Products currently on the market which might serve the needs of this project include Sharepoint by Microsoft and infoRouter, or an open source product, such as openKM, which would require some customization.

Such an endeavor would require cooperation and collaboration with statewide and local IT departments at the earliest inception of the program. Technology considerations include:

- Server space (physical vs. cloud–based)
- Location of servers (campus or SBCTC)
- Compatibility with existing software/hardware
- Long–term maintenance of the platform, including upgrades and technical support
- Stability of software/hardware
- Identification of key IT personnel at the SBCTC and college level to coordinate efforts
- Identification and selection of system administrators
· Training and expertise of key personnel to develop and/or administer and maintain product

4. **PRODUCT/Service MARKETPLACE**

The projected audience for the proposed product are the employees of the CTC system, which include administrators, faculty, classified staff and state board employees. We recently conducted a survey of likely users of a KMS, targeting administrators and staff in enrollment, registration, foundation, institutional research and student services, as well as faculty. Thirty-seven people responded to the survey request, including administrators (62%), faculty (19%) and staff (19%). They were asked to indicate the frequency with which they need various types of information, including: course outlines, financial aid data, enrollment and registration data, accreditation reports, campus-wide surveys, organizational charts, and transfer/articulation documents. Survey results are available as an appendix to this report, but some of the highlights of the survey are:

· Nearly 55% need course outlines at least quarterly
· Over 30% need enrollment data daily
· Over half look at accreditation data quarterly or monthly
· Over 65% look at campus-wide surveys at least every quarter
· Over 55% find these documents on their campus intranet or website
· 95% of respondents said they would use a KMS if it were available

In considering the possible market for the KMS, the LMDC should factor in the existence and current usage trends of other products or systems at individual campuses or statewide. These include:

· the existing SMS, which tracks enrollment, registration and grades
· the Ctclink project, which is an enhanced and updated version of SMS, and will be rolled out in the next three years
· the Open Course Library website, which includes an organized inventory of online course modules and learning objects (lesson plans, assignments, objectives, exams, reading content, etc)
· over a dozen well-established sites nationwide/worldwide for sharing and finding open educational resources
· a new, LSTA-supported, online repository for information literacy learning objects
· existing usage practices: many employees already have established methods of getting what they need and are unlikely to use a new tool
without adequate marketing and cultural change on their campus/workplace
- existing campus intranets or repositories (for example, Bellevue College uses Sharepoint)

During a preliminary presentation to LMDC for this project, one member suggested that the project focus on library-related data and serve the library community exclusively. Such a KMS would include the usage, collections, budget and staffing statistics of all 34 community college libraries across the state, and serve as a resource to directors and librarians who draw from that data regularly.

5. **MARKETING STRATEGY**

There would need to be significant support from key departments within each institution in order to make a KMS successful. Components of that support would include: an administrator to have responsibility over the KMS; IT support, so that it can be maintained on a server; stakeholder buy-in from a variety of departments, to ensure that the correct information is provided; and by administration, to promote its use as a tool to improve communication, efficiency and sustainability within the college as well as the system statewide.

In order for a KMS to be broadly and regularly used, the following criteria need to be met:

- The KMS needs to be satisfy a heretofore unaddressed need. There should not be another system that meets the same need and duplicates efforts.
- The KMS needs to be easily learned. It needs to be intuitive for all authorized users to search, retrieve and upload information.
- The KMS needs to include only current information, or clearly indicate older information for historical purposes. In some cases, a document is best, but in others, a persistent link to a URL is best (an example could include a link to a section of the RCW, which may change annually).
- The KMS needs to be endorsed, supported and marketed at the highest levels across campuses, districts and system. Buy-in is critical for the success of a KMS; without buy-in, the product will not be current or well-used.
6. **Organization and Staffing**

The KMS project would be staff intensive during the development and launch stages, but long term maintenance and upkeep also need to be factored into staffing plans. An administrator, likely in IT, would need to be identified to oversee the system; whether it becomes part of the job of an existing employee or whether a new employee is hired is likely going to depend on each institution. Departments would also need to identify gatekeepers to identify and procure and update documents, as well as establish permissions for who can edit or access information. If a KMS is intended to address information needs across multiple practices (enrollment, registration, completion rates, financial aid, learning objects, course outlines, etc) then staffing would need to reflect appropriate understanding and access to all of those areas. Some questions to consider:

- Would a KMS be designed with input from multiple practice areas and multiple campuses?
- Would a KMS be designed by an outside IT consultant or in-house IT?
- How would SBCTC library staff participate in the development of the KMS? How would library staff expertise be highlighted in this process? How would qualified librarians be identified to participate in this process?
- Once a KMS product is launched, what would be the staffing plan for sustained maintenance and upkeep?
- How would criteria be determined for updating and replacing documents within the KMS?
- Does the LSTA budget allow for long-term maintenance of the KMS? If not, how would funds be secured for on-going staffing costs?

The ctcLink project is hiring a project administrator as well as a technology and integration manager. They have made a significant human resource investment in the project, as well as an expected outlay of roughly $102 million statewide on the launch of the new system. LMDC should consider if and how the KMS project connects to the ctcLink effort.

7. **Schedule**

Funding has been provided for 2012–2013 as part of the LSTA grant to pilot this project. There is potential to continue funding for 2013–2014 as well. There are two components to the grant: 1) to implement the system and 2) to procure data. Although the grant is for librarians to procure data to
provide the system with examples of what a KMS will look like, for later adopters we don’t envision librarians being the procurers of data.

Proposed schedule:

**Fall 2012.........**
- LMDC identifies the scope and audience for the KMS
- LSTA project coordinator solicits participants via mini–grants and identify content to be procured
- Librarians participating in the LSTA grant identify potential platforms for the KMS

**Winter 2013.......**
- Librarians participating in the LSTA grant select KMS platforms on a trial basis with information/data for functionality
- Librarians participating in the LSTA grant identify content to include in the KM
- Librarians participating in the LSTA grant develop taxonomy/classification system for KMS

**Spring 2013........**
- Librarians participating in the LSTA grant share taxonomy/classification system with LMDC
- Librarians participating in the LSTA grant identify preferred platform
- Librarians participating in the LSTA grant create presentation material to share with LMDC and stakeholders beyond

The schedule is subject to change, and depends on LMDC discussions about the KMS’s scope and audience in Fall 2012.

**8. FINANCIAL PROJECTIONS**

Financial considerations include:

- **Initial cost to purchase software.** This is applicable whether an off-the-shelf product is purchased or a product is developed by a contractor. Cost could vary depending on whether administration is centrally located at one institution or distributed throughout the system, as well as the number of colleges that would participate in this project.
• **Administration of the software.** Would SBCTC and/or colleges hire new employees, or would responsibilities be assigned to existing employees?
• **On-going costs.** This could include licensing for multiple users, upgrades, maintenance and support.
• **Staffing impact on libraries.** Since this project is intended to highlight the value of librarians as information managers, librarians could have continued involvement beyond the initial rollout. LMDC should consider how this project could change the nature of librarians’ job duties in the coming years.

9. **FINDINGS AND RECOMMENDATIONS**

Through our survey data, interviews with employees and experts statewide, and meeting with LMDC members, the following questions, considerations and recommendations are presented:

• LMDC should indicate what the scope of the project should be by defining what kind of knowledge it seeks to manage. It can range from a document management system, which would be scalable but limited to static information that is available in a few formats, to a full scale system that includes complex information resources such as video files in multiple formats and relational databases.

• LMDC should weigh the advantages of the KMS as originally conceived and consider the long-term staffing, budgeting and maintenance implications of such a project. Particular attention should be made to the smaller colleges in the system, who may have access to fewer financial, staffing and technology resources.

• LSTA funds should identify a piece of this project concept that specifically highlights and capitalizes on the value of librarians, rather than adopting a large-scale project which would rely heavily on outside technical support and partnership.

• LMDC should track the rollout and design of ctcLink, to ensure that LSTA project efforts do not duplicate what the SBCTC is already building. It should also collaborate with ctcLink personnel to see if there are platforms available that could access data from ctcLink, making the information available in a KMS richer and dynamic.
· LMDC should consider developing a KMS specifically focused on information that is relevant to libraries in the first year, designed by and for library directors, faculty and staff statewide. This could be considered Phase I. Such a project would capitalize on existing expertise, require minimal buy-in for outside users or partners, and offer an opportunity to demonstrate a replicable project to other user groups in the future (such as enrollment or registration staff). Long term maintenance, staffing and sustainability would still need to be considered.

· If the results of the statewide library KMS are positive, LMDC could consider promoting the use of a KMS to other CTC user groups using the framework and best practices developed through a pilot. The KMS should focus on statewide councils and commissions rather than individual colleges. The council approach clearly identifies the information needs of specific groups. Councils also have clearly defined users and opportunities to meet and discuss their information needs.

· LMDC should measure the impact such a system would have on the eLearning Council (ELC) and the Information Technology Commission (ITC). Since this project has the potential to require them to commit staffing or technology to LMDC, they should be involved prior to the project’s inception through its development and maintenance.

· LMDC should consider whether to limit the KMS to organizing learning resources and weigh this proposal against one presented by Sharon Winters from Tacoma Community College. That proposal promotes a KMS that includes content from lesson plans to instructional content to be shared among faculty statewide.