

## The Higher Learning Commission Action Project Directory

### Northern Michigan University: Knowledge Management System-Part II

#### Project Details

<b>Title</b>	Knowledge Management System-Part II	<b>Status</b>	REVIEWED
<b>Category</b>	8-Planning Continuous Improvement	<b>Updated</b>	08-30-2011
<b>Timeline</b>		<b>Reviewed</b>	09-21-2011
<b>Planned Project Kickoff</b>	10-15-2010	<b>Created</b>	10-06-2010
<b>Target Completion</b>	11-15-2011	<b>Last Modified</b>	09-21-2011

#### 1: Project Accomplishments and Status

**A:** Year two of the Knowledge Management System (KMS) – Part II Action Project saw the completion of version one of the NMU Executive Dashboard, a tool that will be used to monitor Key Performance Indicators (KPIs) and identify operational issues. The Dashboard presents KPIs in the areas of Enrollment, Student Success, Finance, Human Resources and Diversity. Located at the NMU AQIP action project page [webb.nmu.edu/aqip/SiteSections/ActionProjects/KMSpartII/KMS\\_PartII.shtml](http://webb.nmu.edu/aqip/SiteSections/ActionProjects/KMSpartII/KMS_PartII.shtml) is a snapshot from the Enrollment page of the Dashboard.

Specifically, the following tasks were completed during year two of this project:

- Upgraded existing Cognos software to take advantage of enhanced charting capabilities.
- Purchased additional software tool to enhance metrics and trending capabilities (Metric Studio was purchased, IT staff received training).
- Refined the Enrollment and Student Success Key Performance Indicators (KPI) that were identified in year one of this project.
- Developed KPIs for Financial Resources and Human Resources.
- Added a Diversity KPI category to support the Roadmap's endorsement of diversity for students and employees.
- Developed the underlying database to support the KPIs.
- Developed a prototype dashboard page for each area.
- Held stakeholder review meetings and revamped the financial and human resource indicators.
- Identified the optimal 'drill down' for presenting additional levels of data.
- Tested and verified data for all Financial KPIs (Revenues and Expenses, Grants, Healthcare Costs and Utilities Expenses).

The Action Project will be closed and work on this project will continue within the regular duties of IT.

**R:** After review of the initial phases of the KMS Action project, the institution has displayed **dedication** and **commitment** to realizing the success of this particular action project.

The KMS System should have some far reaching implications for positive processes for the university by supplying current archival data that provides for deeper analysis and depth of progress as an institution in the target areas designated from: information services, finance and administration, institutional research and academic affairs, covering both academic and student service units.

Relative to category 8 of the AQIP process, which calls for "planning continuous improvement", the institution has demonstrated detailed input processes through inclusion of the various leaders of the university system such as the Executive Management Team, the Board of Trustees, College Deans, Directors and Department Heads and an advisory board. These individuals are charged with providing feedback and input in the development of the KMS System that closely relates to the institutions own goals of creating a "roadmap" for an evaluative system for 2015.

The institution has covered the key organizational processes that align with category 8 in the coordination and alignment of strategies relative to their action plan that include: strategic planning, institutional divisional policy revision and development, operational planning, resource management, and reporting capabilities. These areas are expected to be enhanced through this robust system for tracking and measuring progress towards these goals. The university should be acknowledged for seeing this project through from inception to its closure and forethought given to potential iterations for future development. To advance the purpose of the KMS system, the university can definitely find opportunity's during the pilot phases of this project by engaging an 80/20 thinking and analysis philosophy whereby the focus on areas of discovery during the pilot phase will help develop future iterations of KMS.

#### 2: Institution Involvement

**A:** The team working on the KMS project was made up of eight staff members that included the Vice President of Finance and Administration, the Associate Vice President of Institutional Research, the Dean of Graduate Studies, a special project consultant who was working for the President and several Information Technology (IT) staff members, each with data expertise and knowledge. This KMS Team identified and monitored the overall KMS implementation strategy – the first dashboard would be used to identify issues that may need further investigation and action.

The IT staff members met several times each month to review progress and identify the next set of goals. Three overall progress review meetings were held with the KMS team during the year. When the financial KPIs were identified, the IT team worked with the University's Budget Director and a Senior Financial Analyst to review, test and validate the financial data. The IT team also met with the Director of Human Resources to gather input regarding Human Resource KPIs.

The final dashboard review meeting with the Vice President of Academic Affairs and the Vice President of Finance and Administration is scheduled for August 15, 2011. The rollout of the Dashboard will be discussed with the Vice Presidents and a plan will be identified.

**R:** The institution **accomplished**, through the use of a strategic communal plan involving key stakeholders, a feedback mechanism throughout the duration of phase 2 of this project, which appears to have assisted the *development* process through its duration. It is apparent that the team that was working on the project had a clear and definitive purpose in mind for the development of a system that would accomplish the goals for category 8 of "Planning Continuous Improvement." Understanding the challenges and needed outcomes are apparent in aspects of the articulated rationale, organizational process aligned, monitoring efforts for progress, and challenges met regarding benchmarking as the "end result."

The team is also **noted** for the inclusiveness of *academic affairs* departments from both the academic and student service side for input that is critical from these particular areas, where valuable insight can be attained and implemented. This was evident in the structure of the makeup of the team responsible for the inception of KMS, from the conceptual to the initial resulting phases of KMS. There may be additional opportunities for the university to look at utilizing one of the other Michigan peers who could serve as potential consultants. External consultants provide a *summative* level of awareness that is often appreciated in such *formative* processes. Consultants who are external may also provide insight from a *global* perspective beyond the university for potential advancements in any rebuilds of the KMS system. External consultants relative to the peer relationship of the university within the state provide an opportunity to help build and foster *collaborative* relationships relative to the AQIP Category 9.

### 3: Next Steps

**A:** The official Action Project will be concluded by September 1, 2011 once the final dashboard review meeting is held with the Vice Presidents and the roll out plan is discussed and identified, but there is much more work to be done in this area. The next dashboard development will be in the area of benchmarking. A plan and timeline for creating a benchmarking dashboard is being developed and will be established by September 30, 2011. Data from the Higher Education Institutional Data Inventory (HEIDI) will be used to present information that shows how NMU compares to its Michigan peers. This activity is designated as an objective on the Finance & Planning unit Outcomes Assessment Plan.

**R:** The university displayed **diligence** in the pursuit of maintaining timelines for moving through milestones throughout this project at a pace that helped keep the action project on track. This provided for re-assessment of aggressive targets and plans that allowed for *quality building* rather than immediate results, which can often be disappointing after such assertive efforts, however, in this case, **revisoning** produced a *higher quality project* and repurposed efforts. Relative to category 8 and processes, Item 8P5, the institution in the development and completion of this project has valuable insights into future ways to address preparation and planning for such endeavors and should be commended for that level of awareness and insight.

Relative to category 8, the institution can look to the section-*Context-* for analysis, 8C1-the institutions *vision* of what their institution will be like in the next 5 to 10 years, as a result of the information garnered from the KMS system. This system as described in section 1 maintains that it is a process for managing NMU's strategic, operational and resource performance and provides an infrastructure to support the NMU strategic plan of having a road map for 2015. This is relative to AQIP category 8-8C2-"What are your institutions short and long-term strategies?" This particular project addresses the short term aspects of providing an infrastructure for operational processes and tracking. This process should also lay the foundation to provide the opportunity for development of long-term goals associated with the KMS system that could be articulated in the next project plans for the university.

### 4: Resulting Effective Practices

**A:**

- Spend the most time developing the key performance indicators – they are the basis for what you want to measure.
- Prototype dashboard pages should be created to present a starting point to work from.
- Standards for presenting the data on dashboard pages were identified and are now part of NMU's Dashboard Best Practices.
- Although IT has the software expertise to build a KMS, the data subject matter experts should be involved from the beginning of the project to assist with testing and data validation.

**R:** You have definitely stated some **reflective** processes as a result of hindsight and experience in moving through this valuable project. The university should be acknowledged for the conceptual undertaking and development of a tracking system that sets the university on pace with goals relative to the next target in the areas of benchmarking and future organization for the school.

The data presented on the dashboard pages is also an excellent way to present an illustrative visual for users and constituents for immediate analysis of key indicated areas being tracked. In addition, the idea of a *prototype dashboard* page created to present a starting point to work from provides a *mock up* and visual that is conceptual to those who are planning the development of any kind of software or web application, and is excellent insight into the technical aspects of planning such an endeavor. Such measures are *preventative maintenance* and *preventative programming* strategies. Focus groups could be a potential opportunity. These groups provide yet another layer of insight that is valuable and consistent as the process continues. It can provide rich, descriptive feedback. The university has demonstrated clear motivation and integrity in the observance and actions that have led to the resulting effective practices that will enhance the future of not only the university but of a new application like KMS.

### 5: Project Challenges

**A:** One challenge that will be faced regarding this action project is meeting the demand for enhancing NMU's Knowledge Management System. Many benchmarks identified in a 2008 Benchmarking Action Project are to be reviewed for inclusion as a KPI in this dashboard system. It is an ongoing process.

**R:** The institution should first be acknowledged for the courage, endurance and commitment to setting this operational standard as a goal and seeing this project through. Any challenges in this case appear to have become opportunities as a result of review and remediation, moving the project through successful completion of the first initial phases of the KMS system.

The adoption of technical applications will definitely require an iterative process that builds upon itself and is based on areas of *opportunity* that result in feedback and issues related to this system. Inside of the challenges identified by the university of *benchmarking*, this definitely correlates to AQIP, category 8, under results, item 8R1-8R4 where the institution will find prospects from benchmarking and addressing questions such as projections of performance for strategies in action plans in the next one-three years, as well as how projections compare with those of other higher education institutions and those even outside of the education community.

Integrating a definitive benchmarking component in this particular technical application could be achieved strategically because of experiences garnered in the first iteration where the school realized resulting *effective* practices. These insights could be used in conceptualizing the benchmarking components and could be seen in the initial stages of a mock-up presented to a focus group for idea generation and brainstorming.

Examples taken from the business community could also present unrealized opportunities where areas such as "technical" benchmarking and "competitive" benchmarking could potentially be explored for their uses inside of the KMS system. Now that the university has actually developed the application, the future is indeed promising for the inclusion of such strategic goals. The experience of bringing an organizational application to fruition has also brought with it some future preventative programming thoughts and potential additional tracking applications inside the KMS. A Knowledge Management System could also integrate tracking stats for faculty, student persistence applications for retention insight as just a few additional operational components where the school may want to consider taking this oracle-like system.