## Learning Management System Implementation: Challenges and Opportunities

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A Learning Management System (LMS) provides software for planning, structuring, delivery, tracking, and reporting of instructional content (instructor-led, on-line, and blended) and its use by learners. LMSs, also called Course Management Systems (CMS), have been implemented in many academic institutions, as well as adopted widely by corporations for purposes of training, employee development, and regulatory compliance. Organizations are also using these systems for "talent management" - to store and retrieve data about available human resources with appropriate skills, knowledge and experience for particular deployments, but who are often globally dispersed. These systems are sophisticated, complex, and often less than optimally friendly or intuitive. Successful implementation of such systems requires skilled management, analogous to Enterprise Resource Planning (ERP) systems, which have been widely deployed and studied over the past couple of decades to integrate business processes. This presentation will discuss the background, current status, and future directions for an LMS implementation in a Federal Agency. Lessons learned from this project are used to develop a qualitative research framework drawn from Enterprise Systems research. The presentation will conclude by soliciting participation in the research project from other organizations who have implemented LMS.

The decision to implement an LMS was initially driven by several factors. The organization sought to transform itself from a task-based organizational model to one focused on human capital competency. External factors that influenced the decision included the eGov initiative, expanded reporting requirements from OPM, and the Government Performance and Results Act (GPRA). The organization's goal was to align learning opportunities, performance support, and career development. Technological advances in instructional technologies, the rapid expansion of eLearning, and the increasing availability of COTS on-line training resources and applications provided further impetus to adopt an LMS. The unique mission and business processes of this organization have warranted development of customized training materials, in addition to using the LMS to deliver pre-packaged on-line learning libraries such as Skillsoft. The initial implementation of the LMS encountered challenges, which led the organization to re-examine its goals for the LMS and to develop a set of actions to address the challenges. The results of the new initiatives, scheduled for rollout in late February, will be reported at the conference.

The Research Project in Progress will use a mixed qualitative/quantitative approach to identify critical success factors (CSFs) for implementing integrated LMS, as well as discover metrics for measuring system implementation success. A small number of organizations will be studied in depth, via semistructured interviews, observations, secondary data, and surveys, if needed. The ideal respondent would be the Chief Learning Officer of the organization, who would then identify additional respondents within each organization. Data will be collected by the principal investigator, will be confidential and anonymous, and will be reported only in aggregate. Data will be collected via interviews, observation, existing quantitative metrics and/or reports already generated by the organization to track usage, and potentially followup surveys of LMS users. Data solicited will include: 1) general organizational background and demographics, 2) organizational goals and processes leading to LMS implementation, 3) challenges and risks encountered and how they were addressed, 4) an assessment of the current level of implementation success (or failure), and 5) future plans. The results of the research will benefit LMS managers and their organizations by helping them make more effective use of the LMS to accomplish organizational goals.