Technical Proposal – Attachment 2

Note:

All scenarios below should be discussed, where appropriate, with an eye towards administrators using their mobile devices or a desktop computer to do their job. Additionally, as Purdue’s four campuses sometimes act as one and other times act independently, please describe how the scenarios below can be accomplished in a single or multi-tenant environment.

Case Study #1 - Getting Data In

The start of the semester is looming and Melanie Gurshwin, an LMS administrator, is tasked with setting up the real time automatic feed from the Student Information System (SIS) into the LMS. It is important that the feed automatically adjusts as students add and drop courses, allows her to set automatic data conversions between SIS fields and the LMS, and allows her to manage manual changes that override the automatic feed. She needs a robust notification system (dashboards, emails, texts, etc.) that keep her informed of the progress and allow her to quickly manage errors, approvals, and the logs of what has happened.

Melanie also administers the non-credit and staff professional development course enrollment. These learners are both internal and external to the institution and use a variety of credential options. She will need the same notification and management system as the for-credit enrollment sources.

As the number of sources grows, Melanie needs help in maintaining the environment. She will need different staff to have different levels of access to allow them to have access to only the areas they should while maintaining proper logging for who does what.
Case Study #2 - Getting Data Out

Professor Patel teaches a senior level practicum course in computer science requiring her students to take on external partners as reviewers and clients. At the end of the semester, Professor Patel needs to easily push final grades into the Student Information System. Additionally, as part of her course, students have the ability to earn a micro-credential with their coursework that meets industry level standards. After Professor Patel approves their work, the system should automatically award and export the micro-credential to a 3rd party accreditation system while also giving each student the option to export to common cloud storage providers (OneDrive, Google Drive, Dropbox, etc.) or to the universities portfolio system(s).

Professor Patel has taught this course for a number of semesters and regularly downloads the analytics in an industry standard format to compare and contrast current data from previous semesters. Additionally, she uses this data throughout the semester to ensure that students are reviewing her feedback. Professor Patel uses this to improve her course and understand how her students are adapting to pedagogical changes. She also downloads the entire course and its contents into an industry standard format so that she can take the course with her if she decides to ever leave the institution.

Additionally, the university has determined that Professor Patel’s course is strategically important to student’s long-term success. The university needs to combine LMS analytics with non-LMS data and therefore wants all LMS industry standard analytics data pushed in real time to the universities central data repository allowing different levels of administration to ensure students are finishing their career successfully.
Case Study #3 - Day-to-Day Technical Support

Debra Jensen is a lead LMS administrator and assists with faculty requests and support. Much of Debra’s day-to-day requests require her to look into courses and sections for specific issues. She also has the need of quickly adjusting her role in the LMS to see potential issues from the administrator, faculty, TA, and/or student perspective in order to resolve individual issues or identify potential problems.

When she cannot resolve a problem, Debra needs to contact the LMS vendor to get help. By the time she figures out she needs help, it is Friday at 7pm. Debra needs the LMS provider to handle the request quickly, outside normal business hours, and provide feedback in a way that enables Debra to either let the faculty know the issue is resolved or what the next steps are to resolve the issue. Daily (if not more) communication between Debra, the vendor, and the faculty are needed to ensure the faculty can continue teaching without interruption.

Lastly, as usage of the LMS increases, support needs also increase. Debra would like to delegate responsibilities for certain courses, departments, or entire colleges at the institution. She, as well as anyone she delegates responsibility to, needs an easy to use management interface so the cascading of roles and responsibilities are easily seen, understood, and logged.
Case Study #4 - System Updates

Marcus Weir works directly with instructors at Purdue to understand how to effectively use teaching and learning technology in their classroom. As part of his role, he needs to understand any new and upcoming changes to the LMS and how it may impact the learning experience. His expectation would be that any new features or functionality have already been fully tested by the vendor to not only ensure they work but also that they are fully compliant with security, accessibility, and other university standards. He is in need of appropriate lead time to fully test new features and functionality from various roles (administrator, instructor, TA, student, etc.) in order to effectively build learning materials and communicate change. Marcus will also need to communicate with administration at each campus so they can understand the impact of selecting enabling or turning off each of the feature updates. For major changes, Marcus needs to be able to run a report to understand who will be impacted so he can communicate with the faculty about those changes.

Marcus also understands the ebb and flow of the university and would prefer if major changes were not happening during already stressful times for faculty and students.

Lastly, he would like a partnership with the LMS vendor to provide feedback from faculty and instructional partners about their experiences and new instructional needs. It would be important to Marcus to see how the faculty feedback is incorporated to upcoming development roadmaps.
Case Study #5 - Third Party Integrations

Professor Wang wants to integrate a new engagement technology in his course but wants to see all options available before making a final decision. Professor Wang wants to see solutions that are already supported by the institution as well as all of the potential solutions that the vendor has approved for use in their LMS. Once he sees all of the solutions, he finds the right technology and needs a way to request integration for his course. The tool does not need to show for everyone using the LMS but should be tailored to his specific course and allow for automatic syncing of data between both platforms (automatic enrollment changes, gradebook updates, analytics, etc.). However, after successfully using the tool, Professor Wang’s colleagues in the department also decide to adopt the tool. His colleagues will need to easily request access to this tool for integration into their courses and the LMS administrator will need to give the entire department access. As success continues, other specific courses, departments, or entire colleges request access. Although the university doesn’t have a system-wide license to the tool, the LMS is able to properly provide access to the appropriate groups.

As this and other solutions grow or decline, campus administration will need to run real-time reports of usage of this third-party integration in order to properly understand the instructional technology needs of the system as well as remove or change licensing terms for those integrations.

Lastly, administration does not want to spend development time and/or resources with each integration but instead wants to focus on those that adhere to industry standards such as IMS Global’s LTI Advantage. Additionally, as the standards continue to develop, it will be important for the LMS vendor to not only adhere to the new standards but also be a leading voice in the promotion of adoption by third party vendors.