



How to Launch Lean in a University

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Starting a lean initiative at a university can be a daunting task because you cannot turn to the traditional methods that have been explained in books. The traditional approach helps companies emulate the manufacturing model of the Toyota Production System. The transformation is based on a hierarchical structure that is not as prominent in a university environment. The traditional process includes starting at the top, developing a strategy and a change management team, creating a value stream map, engaging a *sensei* (Japanese for teacher) and following it all.

While the university environment is different, some of the same traits are necessary in any change management situation: leadership, vision and guidance. As we have spent the past two years rolling out lean at the University of Minnesota, we have followed a five-step approach that is outlined below.

Step one: Find early adopters who have an initial interest or need to improve their processes. Our experience shows that a lean transformation in a university environment starts with the nonacademic departments. The foundational concepts of finding and eliminating waste are much easier in the more concrete areas of organizational support.

Step two: Make it clear that “transactional lean” is different and sometimes more difficult than “manufacturing lean.” Casual observers cannot see the wastes hidden in the business processes of the university. An effort must be first applied to create a new lean language that all departments can understand. Training materials that internalize lean principles enable the organization to foster a better understanding of intent without defensiveness.

Develop training material to educate early adopters and their staffs on the power of lean and how they can use this toolkit to achieve participative and collaborative process changes. Use training materials that include examples of lean applications in a university environment. Any reference to the old-school manufacturing examples turns the audience off and just reinforces thinking that supports the “we are different” debate.

Step three: Create and use a central improvement office that will support departmental leaders and early adopters in their efforts to launch continuous improvement activities. Communication and organizational development must begin with a centralized effort to support process standards and help prioritize the effort between departments. Another critical role within



the centralized support staff is to spread the energy around *kaizen* events and encourage replication throughout the university.

Step four: Once a department is selected to undertake the initial launch of lean at the university, determine what the initial trial *kaizen* events should be. Select three demonstration *kaizen* events. In the University of Minnesota's implementation, the events were scheduled six weeks apart.

The first event should be simple, small in scope, have a high likelihood of success and have a visual solution that affects many people in the department. The second event should be slightly larger in scope and have visual benefits, with the selection weighted more toward results than simplicity. Now that you have two successful events, the third should demonstrate the full capability of lean and *kaizen* process improvement. The third event should be of strategic benefit, larger scope, more complexity, multi-departmental, political and have an unknown solution. It will be an exciting and powerful finale to the three demonstration events.

It is critical that the first three events are successful, the participants have a positive experience and management has an opportunity to see the power of the *kaizen* process. For these reasons, it is important to use a seasoned lean facilitator experienced in transactional process improvement for the initial demonstration events. Equally important is for the department head to assign a continuous improvement (CI) coordinator to work with the seasoned lean facilitator. The CI coordinator will assure all pre-event activities are completed, the event logistics run smoothly and post-event activities are fully completed.

Step five: Spread the effort to other university areas after the first event is successfully completed, and identify additional university departments that show an interest in starting a lean initiative. Use the report from the first event to help sell the benefits to the other departments. Seed the second and third events with participants from these departments. Invite senior leaders from each of these departments to the report sessions for the next events.

It is imperative to get at least one department to hold its first event before all three events are completed from the initial pilot department. Continue to repeat this proven process frequently and persistently.

University perspective

Once the early adopters have been identified and trained, and are conducting lean and *kaizen* events, it is critical to monitor current implementation plans and encourage the next wave



to learn the benefits of participating in these type of events. We have embarked on this task with a holistic approach.

The first and most important method is to communicate the results far and wide to many departments. With such a dispersed population, it is important we communicate through a variety of different mediums. The University of Minnesota has an office of service and CI (OSCI), which operates as an internal consulting group to enhance service, value and efficiency at the university. OSCI's mission is to support the university by serving as a catalyst and mentor for sustainable improvement, energizing and enabling a culture of CI and collaborating with university units to identify and realize sustainable improvements. On that note, the office assists in steering team leadership, resourcing and identifying issues, as well as training and facilitation.

OSCI has put together a lean/*kaizen* user group that meets monthly on campus. This has provided a valuable way for people to come together and learn and share their experiences. Through this group, a wiki has been created so the sharing is virtual and timely. The wiki includes articles on lean, *kaizen* and higher education, as well as training materials and report sessions to showcase what others are doing throughout the university. Both the user group and the wiki are trying to encourage replication throughout various university units. OSCI has also begun to publish a quarterly newsletter to highlight the good work being done and reach out to even more individuals throughout the university.

Another avenue we use to disseminate information is the annual quality fair. This is an event for knowledge sharing and cross-unit collaboration that features more than 35 posters and breakout sessions and attracts more than 1,000 attendees from across the university system. Staff and students from the university's five campuses, other universities, the public sector and private enterprise are invited to attend a morning of networking, poster sessions and collaboration in an effort to discover ways to innovate, improve and inspire.

Thinking long term

Lean process improvement is a long-term journey. The fear of commitment to lean is often a barrier that prevents an organization from starting. To overcome this challenge, the department can start its lean work with a much smaller commitment of only the three demonstration *kaizen* events. The demonstration events allow department heads and key senior staff to see results first-hand. The success of these three events provides the confidence to make a longer-term commitment to the lean method. This is a positive way to energize a



workforce and empower people. Allowing the team to solve process issues and using the methods to problem solve unleashes the innovative thinking that has never been experienced beforehand. Once a leadership team starts down this path, it will never want to turn back.

Bibliography

Office of Service and Continuous Improvement home page, www.umn.edu/osci/index.html.

The Great University of Minnesota Get Together, www.umn.edu/osci/fair.html.

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