SDSU E3: Empowered, Effective, & Efficient

Recommendations of the Lean Processes Task Force

August 15, 2013

Kristi Tornquist, Chair
Teresa Hall, Vice Chair
  Mike Adelaine
  Laura Diddle
  Kinchel Doerner
  Colin Gaalswyk
  Shawn Helmbolt
  Jennifer Novotny
  Derek Peterson
  Marc Serrett
  Jeff Siekmann
  Carrie Steinlicht
Overview
The Lean Processes Task Force was formed by President Chicoine in March 2013 to address the Impact 2018 Strategic Plan goal to grow SDSU’s capacity as a high-functioning university via the integration of Lean management practices. This document is a summary of the work and recommendations of the Task Force as of August 15, 2013.

To date, the Task Force has reviewed literature on Lean and lessons learned from the Briggs Library pilot. In addition we have met with other service-oriented and manufacturing organizations in the region that have adopted Lean management as a way to streamline operations, improve efficiencies, and empower employees. Based on this background analysis the Task Force has developed:

- A working definition of Lean process management (page 3)
- Goals and metrics for SDSU’s Lean initiative (page 3)
- A structure by which Lean processes might be incorporated into colleges, units and departments and recommendations for long-term sustainability (pages 4-5)
- A timeline with milestones (imbedded)
- A list of recommended early adopters/pilots and the criteria used for selection (page 6)
- An analysis of potential organizational homes (pages 7-8)
- Suggestions for leadership (pages 4, 9-10)
- A communications plan (pages 11-13)
- A proposed budget (page 14)

In addition, the Task Force recommends the adoption of the E3 brand and associated logo for SDSU’s Lean initiative and has used it throughout this document. This concept arose out of our proposed definition of Lean.

Over the past three months, Task Force members have engaged with University stakeholders to begin communicating the concept of E3 and Lean, including conversations with:

- Deans
- Department Heads
- President’s Executive Team
- Civil Service Employees
- Professional Staff Advisory Council

After the start of Fall semester we expect to also visit with the Faculty Senate and the Student Senate. Further, we have made educational resources available at the University Bookstore and Hilton M. Briggs Library, and we are in the initial stages of developing a campus website: insidestate.sdstate.edu/technology/lean/default.aspx

The Task Force’s next steps are to present the recommendations included in this document to the University community for feedback during the Fall semester, to conduct at least one Lean pilot activity, and to develop preliminary training resources.
Definition of Lean for South Dakota State University

Lean will lead to the high performance of the university by continually optimizing value for students and stakeholders through:

• Empowered people
• Efficient processes
• Effective outcomes

Our stakeholders are the people who serve students directly and all others who support the people who serve students directly.

Goals for Lean at South Dakota State University

1. The University develops a culture of improvement with a focus on adding value to our students and stakeholders.
2. The University adopts a systematic approach for process improvement.
3. Processes are efficient, open to modification, and transparent.
4. The University is agile in implementing value-added change.
5. Employee input is encouraged and respected.
7. Improved processes comply with external regulations and policies.
8. The University relies on relevant metrics and demonstrates measurable outcomes as it engages in process improvement.

Metrics for Lean Goals

• Number of suggestions for Lean events from employees and students
• Number of units that have engaged in Lean
• Average time from start of Lean activity to completion
• Employee satisfaction measured in the Great Colleges Survey
• Comparison with checklist of rules and regulations
• Lean outcomes
  o Time saved from Lean events and/or
  o Money saved from Lean events and/or
  o Customer satisfaction measures and/or
  o Number of steps removed and/or
  o Number of forms reduced or eliminated and/or
  o Reduction in errors
Recommendations as to Structure and Long-Term Sustainability

1. Hire an “E3 Champion” (by March 2014), initiating the search as soon as possible (see pages 9-10). If it appears that the selection may be delayed, then we suggest that an existing university employee be reassigned for the interim. If the latter option is necessary, this person should have a background in Lean and/or be provided with training.

2. Establish an E3 Advisory Council with the intent that this group would advise and support the E3 Champion, facilitate communication with units across campus, and focus Lean efforts at SDSU to ensure ongoing success (by September 2014). Members would include representation from students, faculty, CSA, PSAC, deans, Student Affairs, Finance & Business, Facilities & Services, and Human Resources.

3. Develop E3 Coaches within the university to include people who demonstrate an interest in and a propensity for Lean thinking. The expectation is that coaches commit to lead Lean events each year and engage in professional development to continue to fine tune their skills (ongoing, in place by Fall 2014).

4. Maintain an E3 website. Web-based information will be an important communications channel for those learning about Lean and for reporting efforts (ongoing).

5. Offer Lean awareness training for all new employees. This may be as simple as having employees watch a short video (in place by Fall 2014). The Task Force believes an SDSU-specific Lean video that incorporates humor with a basic understanding of Lean would be effective.

6. Provide training and learning materials, just-in-time, for units/individuals who will be engaging in a Lean review (ongoing, in place by December 2014).

7. Develop and invest in a train-the-trainer model to expand Lean expertise throughout the organization (ongoing, in place by December 2014).

8. Integrate outsiders/learners into Lean teams to provide a means for people to increase their knowledge of Lean and/or provide expertise (by Fall 2015).

9. Compile and maintain an ongoing inventory of university processes. For processes that impact multiple units, an inventory would assist with prioritizing and logging process improvement efforts (by December 2014).
10. Host a **Lean Summit** with City of Brookings and others to broaden the focus of our efforts and allow us to learn from and share with others (possibly Fall 2014 or Spring 2015).

11. Create a **framework** to assure that efforts meet the definition and goals for SDSU’s E3 Lean initiative (page 3) and specifically focus on optimizing value for stakeholders (by January 2015).

12. Develop an **E3 Users Group** to enable those that have participated in Lean and want to learn more to meet regularly to discuss efforts (by January 2015).

13. Identify a **E3 Liaison** in each unit/department to facilitate communication and coordination with the intent of increasing the visibility of Lean, helping to shift the culture, and providing a conduit for questions and suggestions (by January 2015).

14. Require that new **forms** or form revisions have a Lean review before the form is finalized (by Summer 2015).

15. Encourage the adoption of **other process improvement tools** (by Summer 2015).

16. Create an expectation that **all campus units contribute** time to Lean (by Summer 2018).

17. Create a method for people to suggest processes that might be opportune for Lean and also a reward system to encourage input and suggestions (by Summer 2014). Specifically, the Task Force would like to see physical and electronic “**suggestion boxes.**”

18. Incorporate **student interns** as additional project facilitators. There would be a natural linkage for programs that already have Lean in the curriculum (e.g., OM, ME, AST, ABE). Other areas are rapidly adopting quality management (health care, banking corporate business, etc.) and would potentially find such internship options to be of value for their students in the future (by Fall 2015).

19. Provide **Lean workshops** offered at standard tuition rates for students, continuing education, and professional development. Use the dollars generated to help fund the E3 office (by Winter 2016).
Lean Process Identification

Selection criteria for pilot projects:
1. Obvious level of dissatisfaction with the current process
2. Expectation that success is attainable
3. Expectation that there will be measurable improvement
4. Participation of three or fewer organizational units or departments
5. Clear buy-in and support by department/unit leadership
6. Can be completed in less than a month
7. Isn’t expected to require an IT solution (i.e., technology isn’t the focus)

Processes recommended as pilots to demonstrate Lean:

Pilot #1 -- Print Lab Billing: Print Lab tickets are typically handwritten on paper. People can also use an online form available via InsideState. This information is then reentered into a bookkeeping program. At the end of the month statements are printed out, tickets are gathered, and information is e-mailed to the various campus users. In addition, some departments receive information on copier usage and copies of their tickets.

Pilot #2 -- Undergraduate and Graduate Graduation Application: Based on the graduation application deadline set by the Records Office, students submit the completed graduation application form to the appropriate office. Staff conduct an audit to verify completion of all degree requirements. Once approved, the Records Office is provided with an “up-for-graduation” list of students.

Pilot #3 -- SAARF (Special Activity Authorization Request Form): The process for reserving space on campus for events and programs can be complicated for requesters and often requires duplicative effort by staff. SAARF is the form used to facilitate the planning of events and includes a contractual agreement between the University and user/customer. Signatures are required from various offices and the form is submitted the Central Reservations within the Union.

For future consideration -- Petition Process: Students make requests for exceptions to SDBOR and/or University policies through the petition process. There are four areas of appeal: 1) drop/add, 2) academic, 3) graduation related, and 4) refund/reduced tuition. There are two types of forms: 1) general university petition and 2) readmit following suspension. Depending on the type of appeal, the student initiates the petition, and it is reviewed by various unit levels (up to 8 different offices), signed, and forwarded. After all signatures are secured, petitions are submitted to the Resources and Registration Office for academic record processing.
Analysis of Potential Organizational Homes for SDSU's E3 Office

1. New Planning, Decision Support, and Assessment office
   Pros: May be good synergy with the intent of this office
       Lean is goal and measurement related
       Could share resources
   Cons: Office is not yet in existence
       Job description for leader of the unit is already written and posted
       This area needs assessment to be a high priority and Lean might distract from
       the current primary goals of the unit

2. Human Resources
   Pros: HR is process oriented
       HR works with all vice presidents and units on campus
       Could provide a continuous message and facilitate training, buy in, and cultural
       change
       Could carry the message that Lean is not about lay offs
       Could create teams from across campus
   Cons: Reports through Finance & Budget; would need a dotted line to the
       President
       Would position it somewhat low in the organizational structure

3. Standalone office reporting to the President
   Pros: Could provide the “muscle” to make it happen
       Would be located high enough in the organization to make it be visible and
       effective
   Cons: Standalone isn’t very Lean
       Where would the resources (clerical, etc.) to support this unit come from?
       Doesn’t provide for synergies
       A lone office may not be able to carry the weight of this initiative

4. A Provost or Vice President office
   Pros: Some of these offices have a good understanding of Lean already
   Cons: Which office would it be?
       Why one and not another?
       May appear to leave out other areas
       May send an unintended message of where Lean is most needed
5. Two separate units – one for academic and one for non-academic Lean
   Pros: Provides focus on specific types of university work
         Provides more expertise and back up (redundancy may be good)
   Cons: Divides the University unnecessarily
          May take additional resources
          Duplicative

6. Combination of 3 and 5: have it coordinated out of a single office but have
   facilitation in more than one VP office
   Pros: Allows for some specialization
   Cons: May be complicated
          May be a valuable approach later on but not at first

7. Lean & Green – combine Lean with university sustainability efforts
   Pros: May be some natural linkages
   Cons: May water down each of the two efforts

What are other institutions doing?
- University of Idaho references it in the Division of Finance and Administration as part of
  “Strategic Initiatives and Continuous Improvement Services.”
- Winona State University has two faculty in the Educational Leadership Department who
  provide consultative services.
- University of Central Oklahoma has two employees in their “Lean University” located in
  Administration and Finance.
- The University of Iowa’s Lean efforts consist of five people (three of whom are “workplace
  consultants”) in the area of Human Resources Services/Organizational Effectiveness.
- St. Cloud State University has it in the Office of Strategy, Planning & Effectiveness: no
  assigned staff but trained interested parties throughout the university.
**E3 Champion Position**

**Essential Job Functions**

1. Provide overall direction for and coordination of Lean initiatives.
2. Establish a culture of Lean through communication, leadership, examples, and the involvement of key stakeholders.
3. Interact with unit/departmental leadership to encourage appropriate application of Lean.
4. Facilitate the planning and implementation of process management projects to include defining the scope, developing goals, and selecting teams.
5. Work with unit and departmental leadership to define individual project objectives and assist in setting project priorities and timelines.
6. Incorporate campus-wide professional development to assure the identification and growth of Lean skills at all levels. Plan and implement training on Lean principles and tools. Train E3 Coaches throughout the organization.
7. Conduct and facilitate, as necessary, operational process studies leading to recommendations for implementation of new systems that improve quality, safety, productivity, and reduce costs.
8. Perform high level and in-depth analysis of cross-departmental and cross-unit processes and recommend/facilitate Lean analysis.
9. Evaluate processes, flow-chart them and help improve them.
10. Organize and document findings of studies and analysis and prepare recommendations for implementation of new systems, procedures, or organizational changes.
11. Confer with affected staff to assure smooth functioning of newly implemented systems and/or procedures.
13. Partner with external organizations as appropriate.
14. Provide regular reports and communication on Lean adoption.

**Minimum Qualifications**

- Bachelor’s degree, or equivalent Lean experience, required. Master’s degree or higher preferred.
- Minimum of five years of experience with Lean; higher education setting preferred.
- Experience in supply chain, distribution and/or logistics functions strongly preferred.
- Two years of exposure to Lean through an extensive course curriculum, certification and/or practical experience in an organization with a successful Lean track record.
Required Knowledge, Skills and Abilities

• Strong track record of accomplishments – must be able to articulate this.
• Strong process-oriented and analytical skills coupled with change management skills.
• Solid project management skills/kaizen event experience – from initiation through full implementation.
• High degree of professionalism plus strong communication skills, both written and oral.
• Excellent PC skills to include proficiency in Microsoft Office programs.
Communications Plan

A successful rollout of “Empowered, Effective, & Efficient” aka the “E3 Project” requires a plan to communicate goals, actions, responsible persons, and measures of success for the SDSU community and our stakeholders. To accomplish this, we have developed a communication plan to share the E3 message and to explain the ‘what-how-why’ components of Lean processes and systems transformation, our proposed timeline, and how we will know we have been successful.

Audience and Common Themes
The Task Force’s meeting with Mike Lockrem, Director of University Communications, in June 2013 helped guide the development of the Communications Plan framework and goals. The Task Force was able to identify six distinct constituent groups who will have a stake in the outcomes of the E3 Project over time.

These groups are:
1. SDSU Administration (President’s Executive Team, Deans)
2. Academic Department Heads
3. Faculty
4. Career Service and Non-Faculty Exempt Employees
5. Students
6. External Constituents (BOR, City of Brookings, partner organizations, state of South Dakota)

While these groups have unique needs and expectations, there is a set of common themes associated with implementing Lean at SDSU that will be conveyed as part of the communication plan.

Common themes:
1. Embrace one definition of Lean for SDSU
2. This is an ongoing (long term) effort
3. Focus on the ‘customer’
4. Benefits of Lean to the individuals, units, and groups
5. Connection to Impact 2018
6. Project selection is important
7. This is not a budget issue, it’s a resource issue
Communication Goals, Actions, Metrics:
Implementing Lean within the University system requires a systematic approach to providing optimum value for internal and external stakeholders. The scope and direction of efforts to empower people, make processes more efficient, and assure effective outcomes are informed by the overarching Impact 2018 goal to ‘...ensure high performance through enhanced financial, management and governance systems.” The E3 Project Communication Plan recommends three goals with corresponding action steps and metrics.

Communication Goal 1: Develop and Deliver a Consistent, Positive Message

**Action 1:** Create an information page on InsideState for the E3 Project.

**Measure of Success:** Pages that include information, E3 organizational structure, and contacts

**Responsible Person(s):** VPIT office

**Timeline:** Basic page ready by September 3, 2013 to align with faculty return to campus; organizational structure and contacts added when new E3 leadership in place.

**Action 2:** Tell the Story of E3 at SDSU.

**Measure of Success:** Pilot project success story is posted to InsideState and other communication channels.

**Responsible Person(s):** Task Force working with Information Technology staff (IT) and pilot project unit

**Timeline:** Project selected in August with goal of completion by September 2013.

**Action 3:** Marketing Materials for E3.

**Measure of Success:** One-page handouts including glossary of terms on E3; repository of examples, websites, and related materials linked from InsideState site

**Responsible Person(s):** Content developed by Task Force & future E3 leadership; design & layout developed by University Marketing & Communications (UM&C).

**Timeline:** Basic information posted to InsideState by September 30, 2013; handouts developed for distribution in late fall 2013.

**Action 4:** Build an Identity for E3

**Measure of Success:** Graphic and/or slogan; handouts or other materials for distribution that feature early adopter success story

**Responsible Person(s):** Graphic from IT and/or UM&C office; UM&C writes story for SDSU publications with content/input from Task Force.

**Timeline:** Graphic by August 19; first set of marketing materials for use by future E3 leadership by late 2013.
Communication Goal 2: Provide Resources for Early Adopters

**Action 1:** Develop training materials for units starting the E3 journey.
**Measure of Success:** Documentation of process improvement project for adaptation.
**Responsible Person(s):** Task Force to develop preliminary materials; future leadership of E3 project responsible for ongoing creation.
**Timeline:** Within 2 weeks of completed early adopter project.

**Action 2:** Provide communication channel(s) for early adopter units to share information.
**Measure of Success:** InsideState page for document sharing; success story shared with campus community.
**Responsible Person(s):** Task Force
**Timeline:** Document sharing site paired with InsideState E3 page, September 30, 2013; success story posted to InsideState and Monday Morning Message within 2 weeks of completed project.

Communication Goal 3: Build a Culture of Lean at SDSU

**Action 1:** Establish the mindset (systems thinking) associated with Lean organizations in daily operations.
**Measure of Success:** Lean terms are commonplace in SDSU communications; buy-in at grassroots level.
**Responsible Person(s):** Future leadership of E3 Project
**Timeline:** Coincides with IMPACT 2018.

**Action 2:** Communicate the long-term view.
**Measure of Success:** New projects undertaken, impact on campus community is evident.
**Responsible Person(s):** Future leadership of E3 Project
**Timeline:** Coincides with IMPACT 2018.

**Action 3:** Successful transition from Task Force to New E3 Leadership.
**Measure of Success:** New leadership able to seamlessly take responsibility for E3.
**Responsible Person(s):** Task Force, President, Future E3 leadership
**Timeline:** Task Force sunsets in December 2013.
Proposed Budget

The Task Force is cognizant of possible concerns across the university community that investing in Lean may be perceived as taking away from other crucial needs and priorities. As a group, we have been impressed by our conversations with Avera-McKennon and Daktronics. Within both of these organizations the Lean support structure grew out of savings that resulted in their initial investment in Lean. Specifically, as processes were refined, talented personnel were freed up from work that was no longer necessary and were assigned into the Lean “office”. Our Task Force believes that SDSU has the same opportunity to cultivate Lean expertise. Thus, we propose an initial investment of a “Lean Champion” with the expectation that clerical support and coaches will be found as we engage in Lean as an organization.

Annual Investments
Lean Champion, salary and benefits: $75,000 - $100,000

Equipment, supplies, marketing, travel, hospitality, phone, port port charges, etc. $15,000

Clerical support $10,000 – (Task Force recommends this be shared with another office with available capacity)

TOTAL Annual Investments $100,000 - $125,000

Up-front investment
Initial video production and training materials may require start-up funding

Resources to be realized as we engage in Lean:
Lean coaches, salary and benefits: $30,000 - $100,000 (Task Force recommends this be in-kind and spread across the university with coaches cultivated and shared)