

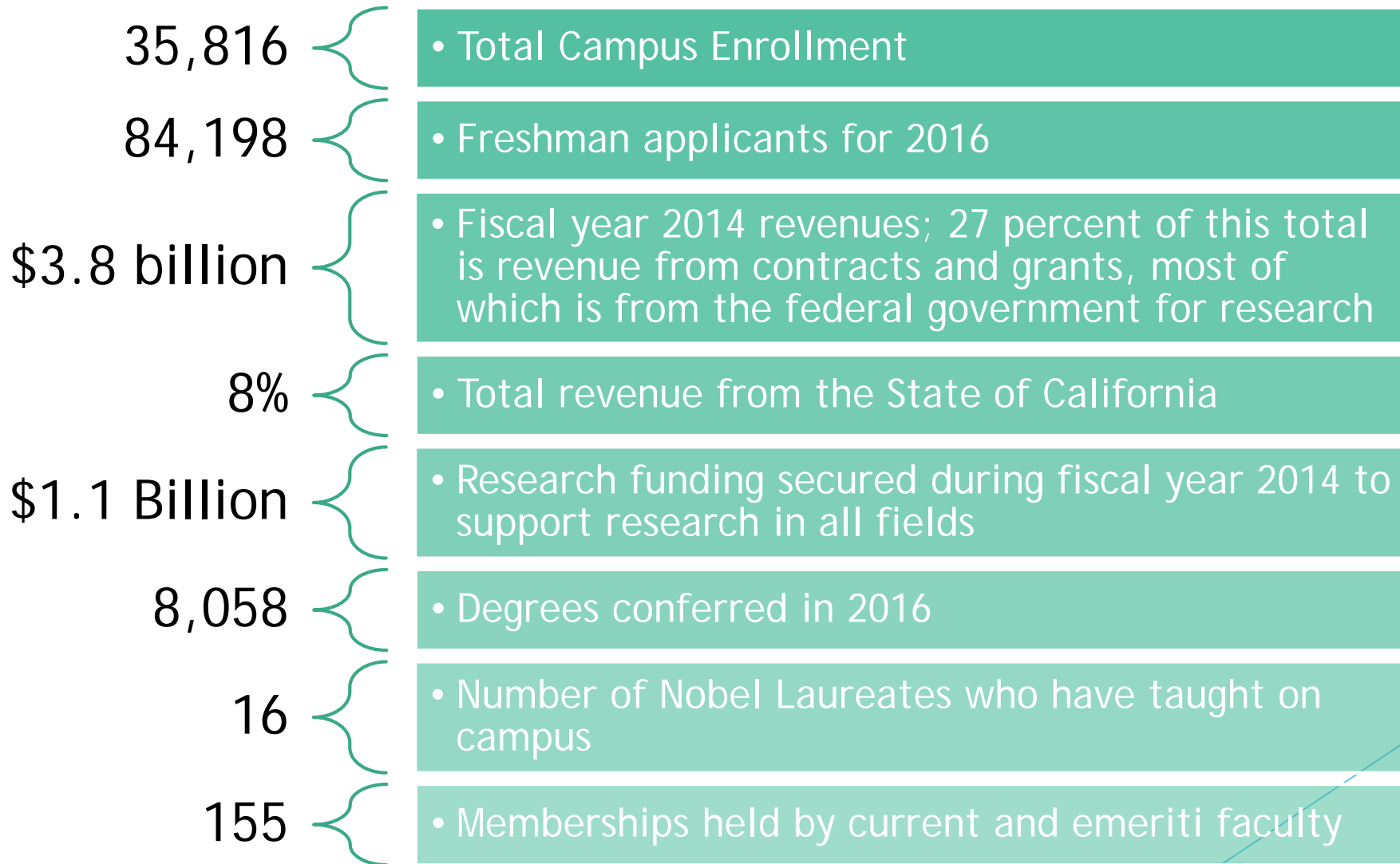
UC San Diego's Continuous Improvement Culture



November 13 & 14, 2018

Presented by Allorah Pradenas & Antonio Nava

UC San Diego by the Numbers



UC San Diego Embraces Lean Six Sigma Culture



Mission: We will transform California and a diverse global society by educating; generating and disseminating knowledge and creative works; and engaging in public service.



Vision: Student-centered, research-focused, service-oriented public university.

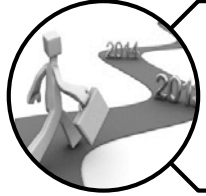


Strategic Plan Goal 5: Creating an agile, sustainable, and supportive infrastructure by ensuring a dedication to service, people, and financial stewardship.

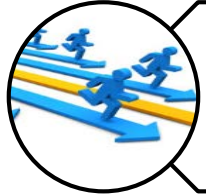
About the Office of Operational Strategic Initiatives

Mission

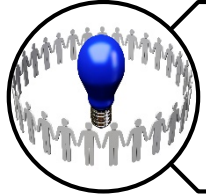
To continuously advance the framework for UC San Diego's sustainable excellence by identifying opportunities and providing solutions that improve overall service, dedication to people, and financial stewardship.



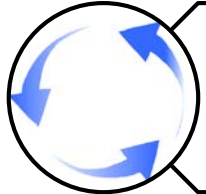
Strategic Planning and Initiatives



Organizational Assessments and Strategy



Innovation Management



Continuous Improvement Projects and Workshops



Continuous Improvement Culture

- ▶ **Lean Bench** - Select set of campus expert practitioners of Lean Six Sigma who engage and lead crucial efforts around process improvement
- ▶ **Business Excellence Community of Practice** - A forum to share tips, best practices, resources, and institutional knowledge to align and support the Universities' organizational missions
- ▶ **Process Palooza** - A day-long annual competition and conference focused on continuous improvement
- ▶ **Lean Six Sigma Training**
 - ▶ White Belt and Yellow Belt - Offered by OSI
 - ▶ Green Belt and Black Belt - Offered by UC San Diego Extension



Top-Down Support



Chancellor Support, Scholarships, OSI, Measurements

Projects

Projects

Projects



Continuous Improvement

Project Management

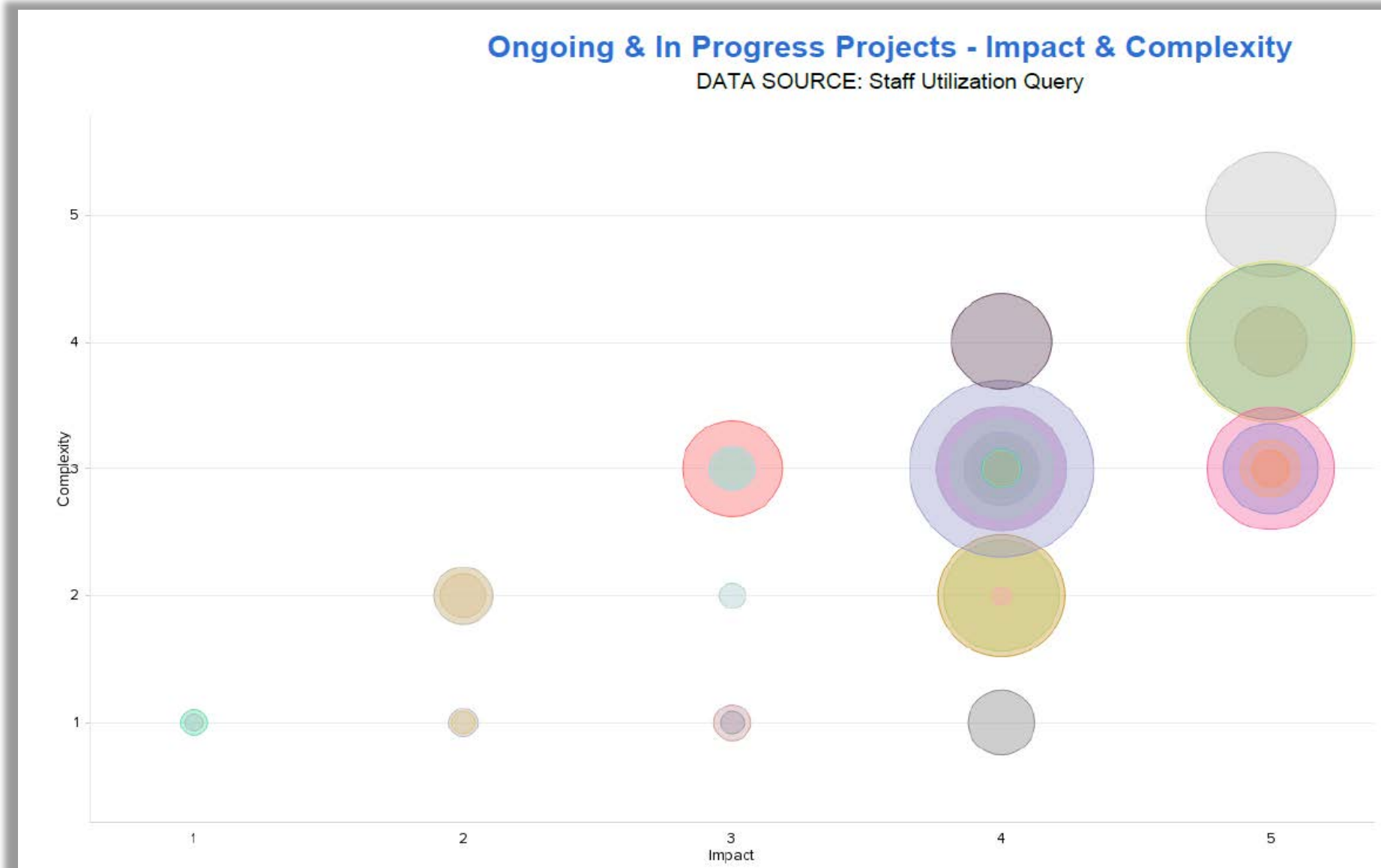
Change Management

Data Analysis

Bottom-Up Support

Ideation Program, Trainings, Communities of Practice

Scored Portfolio to Maximize Impact



Identifying Value in Higher Ed

Lean Six Sigma

Did we...

- Reduce costs?
- Improve Quality?
- Increase Revenues?

Lean Six Sigma in Higher Education

Did we...

- help a researcher create more time to spend in their lab, perform research, submit proposals, or publish?
- Improve the student experience, directly in the classroom or through experiential activities and opportunities?
- help a faculty member create more time to spend with students, performing research, or publishing?
- help a faculty or research administrator focus on their most mission critical work?

What is Lean Six Sigma?



LEAN

Focuses on waste reduction by streamlining a process.

+



SIX SIGMA

Focuses on preventing defects through problem solving.

=



LEAN SIX SIGMA

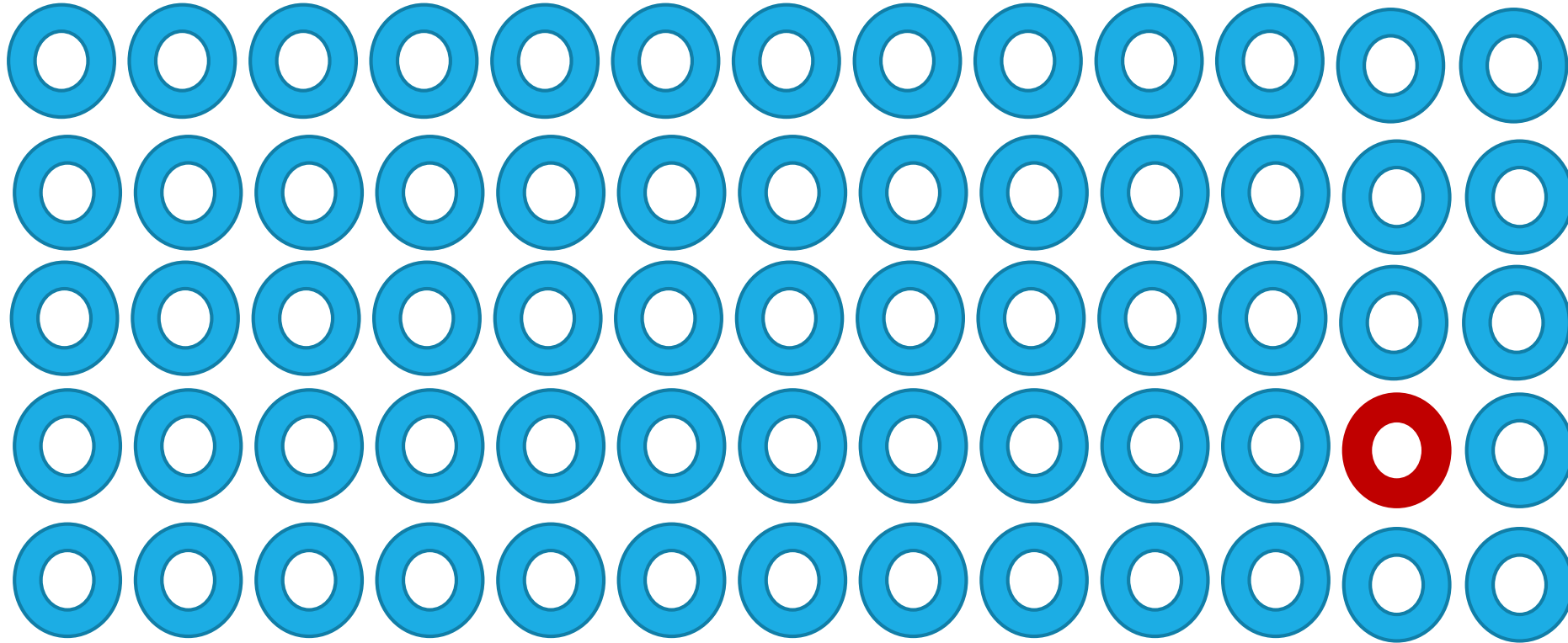
Lean strengthens Six Sigma: Problem solving + improving processes delivers greater results.

SPEED

ACCURACY

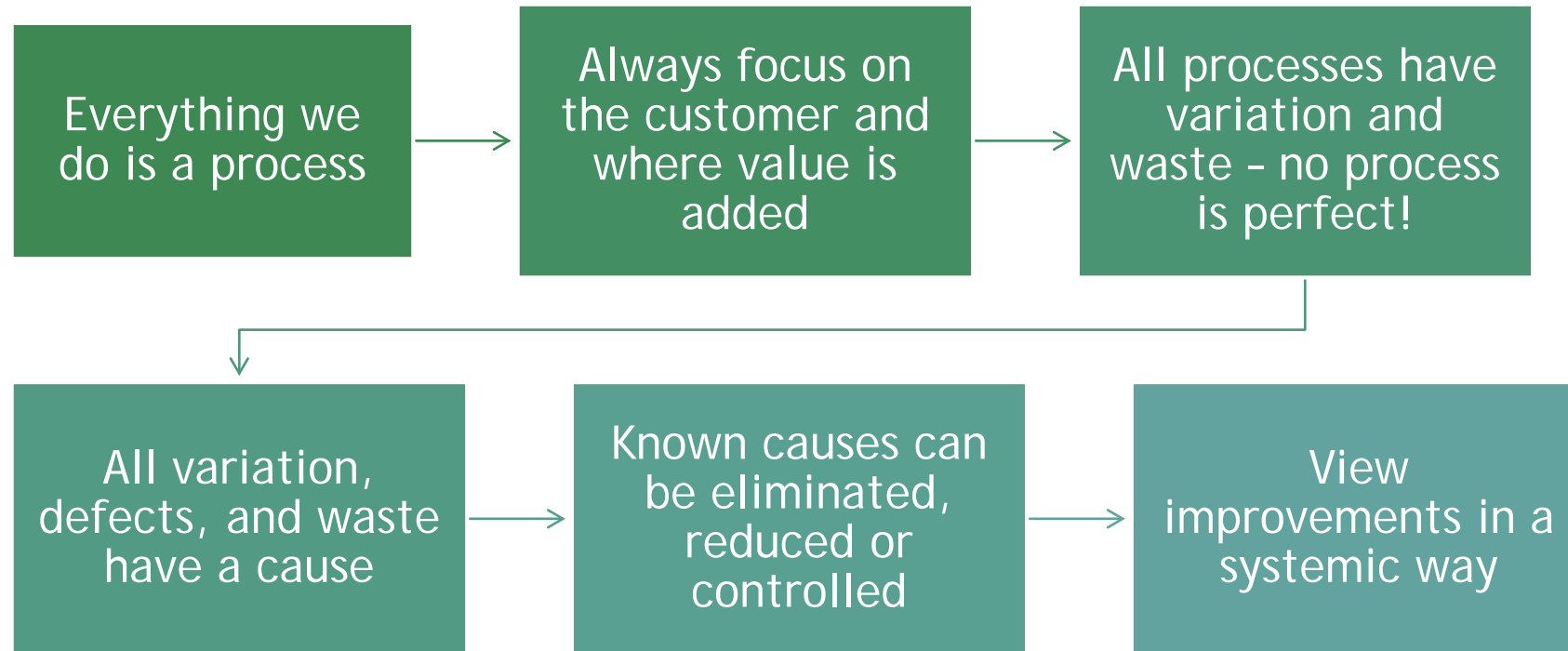
RESULTS

Pursuit of Perfection



To achieve Six Sigma, a process must fit within the customer specification limits 99.9997% of the time (i.e., only 3.4 out of 1 million instances are considered defects).

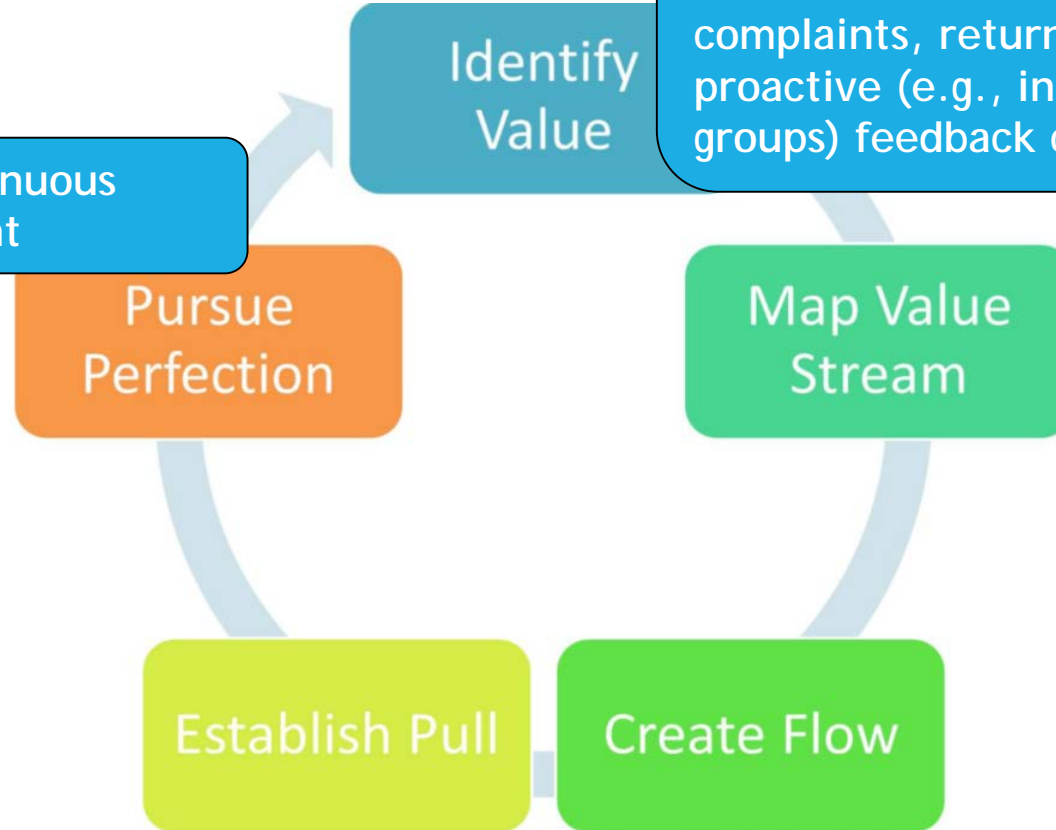
Basic LSS Concepts



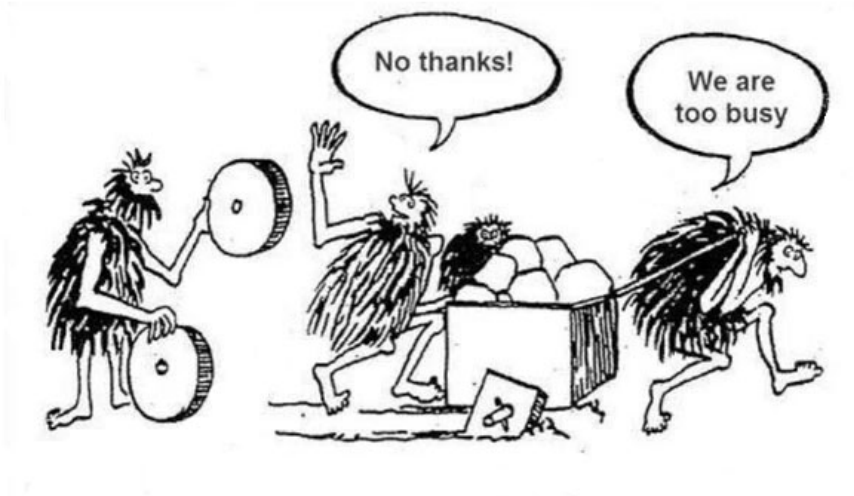
The 5 Lean Principles

Voice of Customer (VOC): The process of capturing customer expectations, preferences and aversions through reactive (e.g., complaints, returns, service calls) and proactive (e.g., interviews, surveys, focus groups) feedback channels

Perfection: Iterative and continuous nature of process improvement

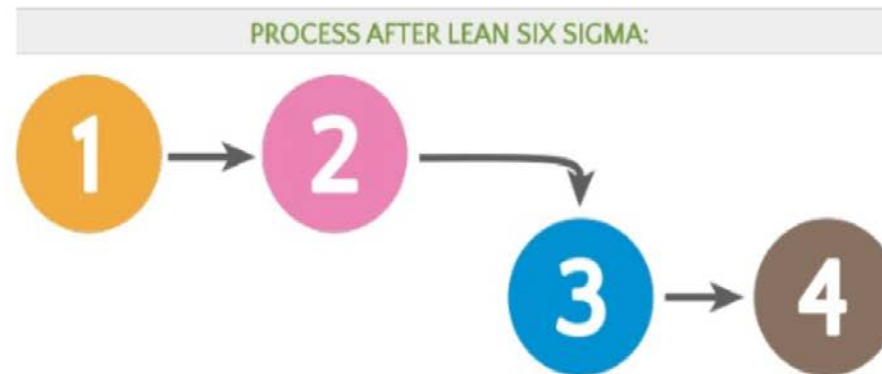


DMAIC Model



Identifying Process Waste

- What do you do?
- How can you:
 - Eliminate?
 - Simplify?
 - Streamline?
 - Minimize?



8 Wastes: DOWNTIME



Defects

Efforts caused by rework, scrap, and incorrect information



Overproduction

Production that is more than needed or before it is needed



Waiting

Wasted time waiting for the next step in a process



Non-Utilized Talent

Underutilizing people's talents, skills, & knowledge



Transportation

Unnecessary movements of products & materials



Inventory

Excess products and materials not being processed



Motion

Unnecessary movements by people (e.g. walking)



Extra-Processing

More work or higher quality than is required by the customer

Voice of the Customer (VOC)

"It takes too long to get my file reviewed!"

"Our students never fill out this form correctly."

"Our patient satisfaction scores keep dropping."

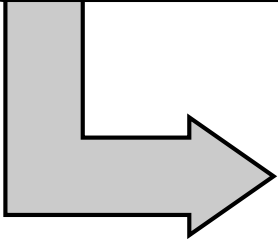
Kaizen/Rapid Process Improvement Event

- ▶ An event focused on improving a process attended by:
 - Owners and operators
 - Customers
 - Project sponsors
- ▶ Can be completed very quickly
(less than a day or over the course of several weeks)
- ▶ Creates buy-in from all stages of the process
- ▶ Considers downstream impacts
- ▶ Creates a safe space that is focused on process, not people

Kaizen Format

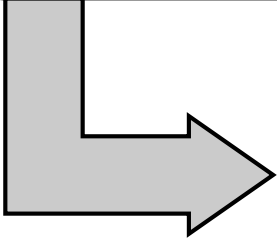
Measure
Current
Process

- Objective analysis of current state
- Value Stream Map
- Data Driven



Prioritize
Solutions

- Identify biggest opportunities to make improvements
- Identify root causes



Develop
Action
Plan

- Assign owners and deadlines
- Progress Updates



Controls: Mistake Proofing



! Sorry, there was a problem.
You'll find more details highlighted below.

Sign up

Meetup members, [Log in](#)

Your real name

john johnson

Your email

john@gmail.com

We hate spam too. We won't share your address!

Pick a password

Location:

Country

USA

ZIP code

Please enter your zip code.

LSS Belt Levels

- ▶ Black Belt
- ▶ **Green Belt**
- ▶ **Yellow Belt**
- ▶ White Belt

White Belts:

1. Basic LSS Terminology
2. How to identify Process Issues
3. LSS Concepts

LSS Belt Levels

▶ Black Belt

▶ Green Belt

▶ Yellow Belt

▶ White Belt

Yellow Belts:

1. Basic LSS Tools Application
2. How to identify root cause
3. How to select improvements

LSS Belt Levels

▶ Black Belt

▶ **Green Belt**

▶ Yellow Belt

▶ White Belt

Green and Black Belts:

1. Project-based application
2. How to measure effectiveness of changes
3. How to leverage tools effectively

Breaking Silos and Reaching Diverse Areas of Campus



IT Services

Create a culture of service ownership and continuous improvement within the recently-unified IT Services (ITS), and weave this thought process into the everyday work-life of each individual.

Integrated Procure-to-Pay Solutions

Create a single channel to onboard any type of non-payroll payee to reduce manual work, status inquiries, and reduce risk of penalties.

Associated Students

Reduced the appointment process for student workers from 21 days to 4 days.

Reproductive Medicine

Rapid Improvement events resulted in over 40 process improvements focused on driving increased patient satisfaction.

Impacts of LSS Projects (cont.)

Improved delivery of manufactured products

- Reduce hotel and venue contract cycle time from 5+ days to 3 days or less

Increased capacity of expensive equipment

- Reduce resolution time for ITS systems downtime activity, resulting in more productivity, less rework, greater compliance, and an annual savings of \$250K (\$285K to ~\$3K)

Improved safety

- Reduce number of knife cuts in Housing Facilities by 50%

Better inventory record accuracy

- Create and implement process for tracking, measuring, and billing for oncology drug waste in IV rooms. Resulted in approx. \$1.6M annual revenue recovery

Quality improvement

- Improve UCSD Alumni Association Workzone tool to increase user satisfaction survey score from 4 to 8.5 points

Productivity improvement

- Reduce delivery time for ARUP lab paperwork to reach billing department from 5-10 days to <5 days

Improved report delivery time and accuracy

- Reduce time to generate quarterly Chemistry/Biochemistry facility reports from 5 hours to 1 hour by automating the process

Faster delivery/approval process

- Improve ITS onboarding process to increase completion rate of onboarding form from 48% to 100% by eliminating unnecessary steps

Discuss

- How do you currently collect and respond to the Voice of your Customer?
- Are there identifiable areas of waste in your processes?
(waiting, extra processing, defects, non-utilized talent, etc.)

Next Steps

- ❖ What is your 15%?
- ❖ Where do you have discretion and freedom to act?
- ❖ What can you do without more resources or authority?

Key Takeaways

- LSS empowers employees at all levels to be change agents
- Formal training provides a common language and tools
- LSS emphasizes collaboration between departments, and can address institutional silos
- Change initiatives are more successful when true root cause is addressed, and when all levels of staff are driving the change

Creating Positive Change Through Strategic Partnerships: LSS Consulting and Training



LSS WORKSHOPS
(5s, Personal Kanban Workshop)



WHITE BELT
TRAINING



YELLOW BELT
TRAINING



CUSTOMIZED
KAIZEN SESSIONS

SAVE THE DATE
DECEMBER 12, 2018

Registration opens on November 1.

Process
palooza
UC San Diego Learning Toward Success

Thank you!

Any questions?

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