

# On the Yellow Belt Road



## *A Lean Six Sigma Journey of Continuous Improvement*

### Submitter

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### Stakeholder Representatives Trained:

We invited stakeholders from across campus to partake in training, participants joined us from: Associated Students, Business & Financial Services, Biology Division, Human Resources, Jacobs School of Engineering, Library, Resource Management & Planning, Student Affairs, Academic Affairs, Research, Scripps Institute of Oceanography

**Special thanks** to the IT Services Finance and Marketing & Communications teams for their support and **UC San Diego Extension** for Green & Black Belt Training.

## The Opportunity

### UC San Diego's Strategic Plan

UC San Diego's Chancellor set five goals in our campus Strategic Plan. One specifically called everyone to *"create an agile, sustainable, and supportive infrastructure by ensuring a dedication to service, people, and financial stewardship."* We believed that a culture of collaboration and continuous improvement was needed to achieve this goal. Accordingly, IT Services chose to invest in, and empower, our staff to make collaboration, problem-solving, and continuous improvement routine and essential to how we do business.

### Information Technology Services

In 2016, numerous IT units formed a new organization: Information Technology Services (IT Services). Our Chief Information Officer, Dr. Vince Kellen, was brought on board to lead the new organization. Dr. Kellen aligned us with the campus Strategic Plan and, with our senior management team, set forth our mission, vision, goals, and values. Embracing IT Service Management (ITSM) as a philosophy and practice, our mandate is to be customer-centric, people and process oriented, and continuously improve our work and services.

Within IT Services the Process Management and Continuous Improvement (PMCI) team was formed to guide the organization in achieving operational excellence through continuous improvement.

### Continuous Improvement Foundation

IT Services selected Lean Six Sigma (LSS) as our primary practice to achieve process improvements. LSS prioritizes the voice of the customer, dovetailing with IT Service Management. LSS identifies root causes and solutions based on facts and practices are implemented with controls to ensure that fixes last.

In Fall Quarter 2016, our senior management team committed to certifying all IT Services staff, now and on an ongoing basis, as LSS Yellow Belts. We partnered with the **Office of Operational Strategic Initiatives (OSI)**, who provided an engaging, hands-on eight hour Yellow Belt training. OSI tailored training content to our audience and delivered a quality experience that met our training goals:

- Hands-on experience with tools that can be used immediately
- Understand Lean Six Sigma Methodology and the Define, Measure, Analyze, Improve, and Control (DMAIC) Process
- Learn strategies and skills to achieve measurable and sustainable process improvements
- Understand and incorporate data in problem solving
- Learn to identify and correct problems on an on-going basis

We required all staff to take the training, even if they already had a LSS certification. This provided the entire organization with a shared experience upon which we could build. It also helped all IT Services staff to meet one another and make personal and work connections.

In six months 350+ staff and an additional 52 partner staff were certified Lean Six Sigma Yellow Belts.

### Continuous Improvement Program

Concurrent with LSS Yellow Belt training, PMCI set up a program structure that would keep us on our continuous improvement journey. The program focused on strengthening staff skills with additional training, tools, events, and recognition that put our training into action.

To build bench strength, IT Services committed to train up to 40 LSS Green Belts and 3 LSS Black Belts. Advanced certification came with the responsibility to mentor other staff and lead at least two process improvement projects in IT Services annually. To guide this program, we set criteria for participation, centralized funding, and established processes for staff to participate.

In seven months we trained four Green Belts (with four in training) and one Black Belt (with one in training).

Additionally, we put together “Lean Six Sigma in Action” to apply training, keep staff engaged, and show results. Knowing staff will be at different points (based on experience, comfort level and interest) we set the following goals for the plan:

- *Knowledge Sharing* – Publishing reference and helpful tools
- *Training* – Informal and formal learning opportunities
- *Transparency* – Show progress towards goals and continuous improvement accomplishments
- *Recognition* – Recognize staff and team accomplishments

### Lean Six Sigma in Action

In March 2017 we announced our continuous improvement program Lean Six Sigma in Action in our intranet and email.

Our trained practitioners are empowered to participate, lead, and influence change. They engage staff through conducting a “5S” (a practice to make personal and workspace improvements) or participating on a continuous improvement project are different ways to engage staff. To keep everyone on the same page and show continuous improvement in action, we solicit improvement ideas and publish accomplishments and their impact. Accomplishments formally recognize teamwork, advancing us toward our goal of making collaboration, problem-solving, and continuous improvement routine and essential to how we do business.

### Timeframe

Continuous Improvement Foundation	LSS In Action Program Definition	LSS in Action Launched
<ul style="list-style-type: none"><li>• September 2016 – March 2017</li></ul>	<ul style="list-style-type: none"><li>• February – March 2017</li></ul>	<ul style="list-style-type: none"><li>• March 2017 – ongoing</li></ul>

## Success Factors

We set specific success criteria at the outset of the project:

Success Factors	
	Certified 350+ staff as LSS Yellow Belts
	Certified 52 partners as LSS Yellow Belts Trained representatives from: <i>Associated Students, Business &amp; Financial Services, Biology Division, Human Resources, Jacobs School of Engineering, Library, Resource Management &amp; Planning, Student Affairs, Academic Affairs, Research, Scripps Institute of Oceanography</i>
	Committed to certify up to 40 LSS Yellow Belts (14 out of 40)
	Committed to certify up to 3 LSS Black Belts (2 out of 3)
	LSS Black and LSS Green Belt project cost savings <ul style="list-style-type: none"><li>✓ Unplanned Outage Duration: \$250k with potentially \$1M+ campus savings</li><li>✓ Streamlining UC San Diego Software Licensing: \$85K</li><li>✓ Media Event Support: \$40K</li><li>✓ Onboarding Form Review: \$58K</li></ul>

## Investment & Savings

We bring value to IT Services and our partners, stakeholders, and customers by:

- Establishing a customer-centric and continuously improving culture
- Delivering quality services that meet performance commitments
- Regaining ITS resources and reducing cycle time through service delivery and improvements
- Putting in place simple, integrated, and continuously improving services and processes.
- Increasing customer and employee satisfaction
- Saving \$40K in every green belt and \$100K in every Black Belt project, with a target set for all green and black belts to complete 2 projects annually
- Tracking all Yellow Belt savings through *LSS in Action*

## Staff Response

An anonymous survey of IT Services staff collected the following feedback:

*It was a blast, I was very much surprised and delighted that I was told to attend!*

*I really enjoyed this class, and could immediately apply it to my current duties.*

*The courier simulation was a great tool that allowed participants to practice the concepts presented during the lecture period. The simulation was very hands-on and the three iterations allowed participants to witness how processes begin and how processes can gradually be updated and improved. The experience was also a meaningful and excellent team building experience.*

*Excellent class. The instructors, facilitators were excellent; I strongly believe the inclusion of participants who are NOT part of ITS greatly improved the overall success and level of enjoyment I attained in the class.*

*I have gone to many training sessions at UCSD, but this was the most enjoyable and most relevant experience I've had. I had been worried that it would be boring, but it was a fun class and I was surprised at how much I learned that I could apply directly to my job.*

*The class allowed us to be challenged and work as a team. Great class*