



*Lean Academia:
Applying Lean Principles to
Higher Education*

BACKGROUND

- **Summer 05 - Lean Academia Opportunity Surfaced**
- **JUL 05 - Board Of Regents Visit Vermeer**
- **NOV 05 - ISU & Vermeer Start Grant Application Process Map**
- **Process Improvement Occurs (Chitra Rajan)**
- **Events Planned**
- **Pre Event Data Gathering Work Occurs**
- **JUN 06 – Kaizen Events At ISU**
- **AUG 06 – 30 Day Follow-up**
- **60/90 Day Follow-up**
- **Future Events???**

PRE-AWARD TEAM

- **Event Scope**

Faculty & Industry Discussions Concerning Research Opportunities To An Agreement Delivered To Industry Team (OSPA)

- **Event Objectives**

- 1. Decrease Time Required To Complete Agreements By 25%**
- 2. Reduce Number Of Steps By 30%**
- 3. Reduce Negotiation Turn-around Time By 20%**

PRE-AWARD TEAM MEMBERS

Role	Name	University/Company	Group
Facilitator:	Jim Scott	Guidon/TBM	VP
Leader:	David Corbin	Vermeer	Manufacturing
Member:	Max Porter	ISU	CCEE Dept.
Member:	Gary Gillet	ISU	OSPA
Member:	Diane Meyer	ISU	OSPA
Member:	Ken Kirkland	ISU	Research Foundation
Member:	Lisa Lorenzen	ISU	Industrial Relations
Member:	Matthew Bailey	Pioneer	Contracts
Member:	Kevin Smith	Pratt & Whitney	Program Mgmt
Member:	Kathryn Berry	Rockwell Collins	CI
Member:	Steve Carignan	UNI	Admin & Finance
Member:	Ann Rickets	UI	OSPA

POST-AWARD TEAM

Event Scope

- **Agreement To Account Setup**

Event Objectives

1. **Decrease the time required to complete the process by 25%**
2. **Reduce the number of steps involved by 30%**
3. **Establish key points for communicating progress and develop visual tracking mechanism**

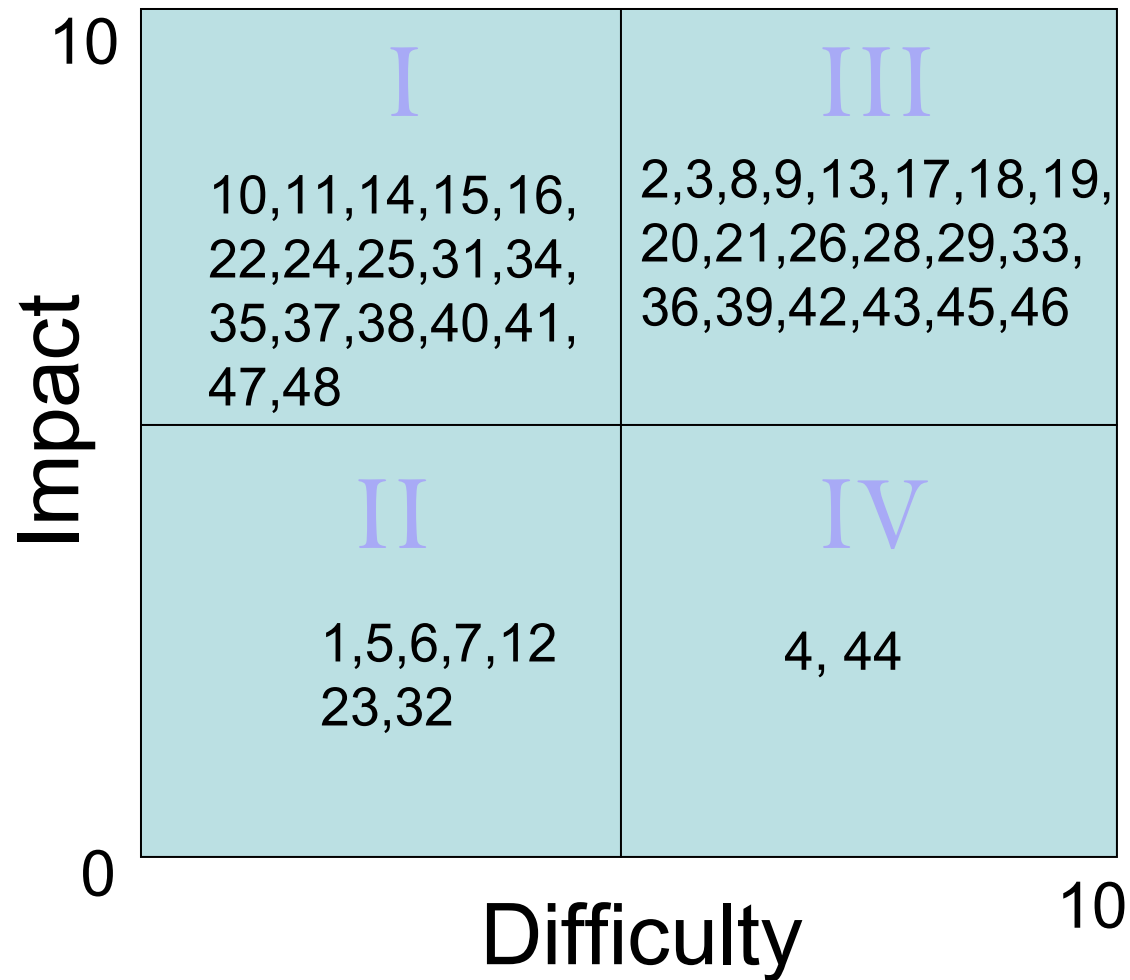
POST-AWARD TEAM MEMBERS

Role	Name	University/Company	Title
Facilitator	Jim Scott	Guidon/TBM	Vice President
Team Leader	Louis Norton	Vermeer Mfg Co	CI Manager - BP
Member	Laura Reed	University of Iowa	Organizational Effectiveness and Worklife Services
Member	Dean Shoars	UNI	Director of Physical Plant Administration
Member	Becky Musselman	ISU	SPA Manager
Member	Tammy Polaski	ISU	OSPA Assoc Director
Member	Jeff Klein	ISU	SPA Accountant
Member	Jamy Rentschler	ISU	OSPA Budget Analyst
Member	Deb Matney	ISU	OSPA Assist. Director
Member	Carolyn Cutrona	ISU	Professor & Director Institute of Social and Behavior Research
Member	Kathy Dobbs	ISU	Associate Controller
Member	Sharon Prochnow	ISU	Program Coordinator: Center for Transportation Research and Education
Member	Venita Currie	ISU	Academic Fiscal Officer: College of Liberal Arts and Sciences
Member	Lynette McBirnie	ISU	Administrative Specialist GDCB Department
Member	Cheryl Sansgaard	ISU	Administrative Specialist IPRT
Member	Jody Sanders	ISU	OSPA Assistant Director

PROCESS MAPPING



IMPACT DIFFICULTY MATRIX



IMPROVEMENT EXAMPLES

- **Project Investigators Better Prepared**
- **Agreement & Project Management Tools “Mistake-Proofed”**
- **Upfront Agreement & Project Management Documentation Enhanced**
- **Project Approval Process Streamlined (& Separated)**
- **Eliminate At Least One Budget Review Loop**
- **Clerical Work Re-assigned To Clerical Staff**
- **Negotiation Process Streamlined**

PRE-AWARD TEAM KAIZEN RESULTS

Improvement Measure	Before Kaizen	Kaizen Objective (% Improvement)	Actual Achievement	%
Decrease Time (AVG Delay)	137 Days	25%	53	38% REDUCTION
Reduce Steps	43 Steps	30%	37 Steps	14% REDUCTION
Reduce Negotiating Turnaround Time (AVG)	60 Days	20%	25 Days	58% REDUCTION

PRE-AWARD KAIZEN FOLLOW-UP

Item	Item Description	Responsible	Time		
1	Develop Tickler List For Matrix	Lisa L.	3 Mos		
2	Develop Training Material For PI & Industry	Lisa L.	4 Mos		
3	Develop Training For Departments On Budgets	Diane M.	2 Mos		
4	Gather & Share Lessons Learned	Gary G.	6 Mos		
5	Create Waiver Forms	Lisa L.	1 Mo		
6	Developed Improved Gold Sheet	Chitra R.	12 Mos		
7	Create Standard Terms & Conditions	Ken K.	9 Mos		
8	Develop Standard Work For Weekly Meetings	Gary G.	1 Wk		
9	Explain & Provide Options For Revisions To Company	Gary G.	1 Wk		
10	Develop Conference Call Standard Work For Complex Contracts	Gary G.	1 Wk		

POST AWARD TEAM KAIZEN RESULTS

Improvement Measure	Before Kaizen	Kaizen Objective (% Improvement)	Actual Achievement	%
Decrease Process Time	16 Days	25%	10 Days	38% REDUCTION
Reduce Steps	86 Steps	30%	29 Steps	66% REDUCTION
Establish Visual Tracking	Limited	N/A	4	

POST AWARD KAIZEN FOLLOW-UP

SHORT TERM		
What are we going to do?	Who is going to do it?	When is it going to be done?
Analyze the volume by College/ Admin Unit to identify a target group for the pilot-look at volume for proposals, awards, and post-award	Jeff Klein & Jamy Rentschler	0-30 days
Identify the members of the pilot resource cell	Becky Musselman & Chitra Rajan	0-30 days
Define resource cell member's responsibilities	Becky Musselman & Chitra Rajan	0-30 days
Identify the location for the pilot resource cell	Kathy Dobbs & Chitra Rajan	0-30 days
Identify systems within OSPA & SPA and establish needed access for members	Troy Nichols & Diane Meyer	0-30 days
Establish base line metrics and discuss desired areas of improvement	Resource Cell Group	0-30 days
Implement Pilot Resource Cell Group- relocate 3 core resource cell members to determined location	Kathy Dobbs & Chitra Rajan	30-60 days
Establish a Unit Coordinator with the appropriate duties & responsibilities	Target Group (College & Admin Units)	30-60 days
Look into in house web based work flow software that is already on campus (FAMOUS)	Kathy Dobbs & Chitra Rajan	30-60 days
Meet with key members in the Target Group to explain the new Resource Cell and discuss how it will impact them	Resource Cell, Becky Mussleman & Chitra Rajan	30-60 days
Hold a special Grant Coordinators meeting to explain the pilot process and goals	Jody Sanders & Sharree Rupert	30-60 days
Establish the most critical metrics and identify the desired goals	Jeff Klein & Jeanne VandeVoort	30-60 days
LONG TERM		
Establish a Grant Coordinator Certification Program	Troy Nichols & Diane Meyer	9 months
Establish a Web CT and a 24/7 training programs for campus community	Shona Roberts & Kshitja Kelkar	18 months
Combine the locations of OSPA & SPA	Senior Administration	18 months
Implement new web based system through Access Plus	ATS	18 months

IOWA STATE UNIVERSITY

OF SCIENCE AND TECHNOLOGY

OBSERVATIONS

