The power of lean principles

Use of lean principles in an effort to accomplish continuous improvement
“This is lean” by Niklas Modig and Pär Ålström, 2011

“On the metaphysics of Production” Lauri Koskela and Mike Kagioglou, IGLC 2005
• Problem
  • Lack of training
  • Lack of leadership
  • Organizational inertia & resistance to change

(“Last Planner System Implementation Challenges» Vishal Porwal, Jose Fernández-Solís, Sarel Lavy & Zofia K. Rybkowski, IGLC 2010)
The problems and action iterations

- Lack of leadership
- Organizational inertia & resistance to change
- Lack of training

(Porwal et al., 2010)

Action with «Minimal Viable Experiments»

- Use lean principles
- Legitimize examples
- Inform/Educate

(Skaar, 2019)
What string of actions create outcome?

Experiment «MCE»
Minimal Causal Experiment

Action (A) MCE’s:
1. Use of principles
2. Legitimize examples
3. Inform/educate

Mechanisms (M) for motivation

Causal powers (P):
- a) Management behavior
- b) Social interaction
- c) Knowledge

Outcome (O):
Continuous improvement?

Skaar, 2019
The TPS house

- Just-in-time
- People and teamwork
- Continuous improvement

Levelled production
- Stable and standardised processes
- Visual management
- Toyota Way Philosophy

*Japanese term for a machine that automatically stops working as soon as a problem/defect is detected.

The Toyota Way

- Continuous improvement
- Respect for people

Challenge
- Kaizen

Genchi genbutsu*
- Teamwork

*Japanese term for 'go and see for yourself'

a) The TPS house

b) The Toyota Way model