

### Games that Engage: Tactile Lean Learning

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### **Concept Gamification**

- Purpose of using games:
  - Experience and Experimentation with new concepts
  - Actively involves the participants (flipping the classroom)
  - Leverages both cooperation and competition dimensions
  - Makes learning fun







#### The Dot Game – Flow and Balance

Job #1: Post-It Notes Mgmt Approval

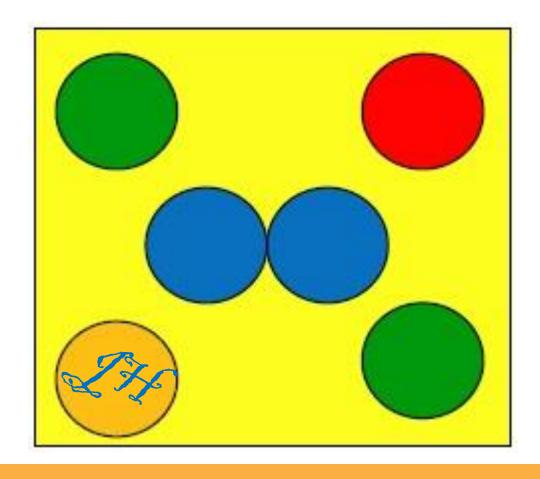
Job #2: Yellow Dot Engineering

Job #3: Red Dot Design

Job #4: Green Dots Marketing

Job #5: Blue Dots Production

Job #6: Inspect/Initial QA Testing



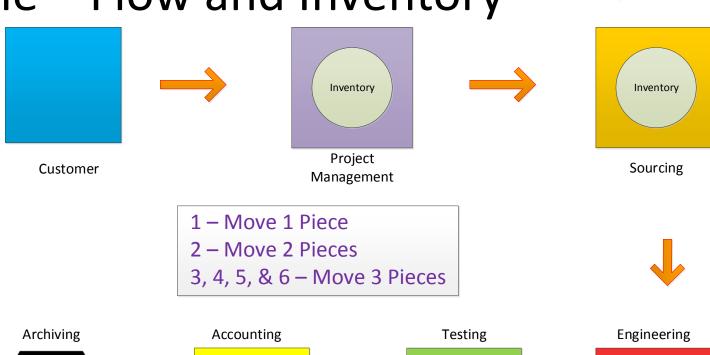






### Flow Game – Flow and Inventory

- Monitor flow, bottlenecks, and jobs all at once
- Use multi-colored dice to introduce resource disruptions
- Use poker chips to track different projects/jobs
- Lead-time/inventory relationship illustrated well



Inventory



Inventory

Inventory





### Toy Train Assembly – Various Topics

- Craftsman Assembly method
- Deploy Standardized Work
- Traditional Mass-Production method
- Balanced Work method
- WIP Kanban method (1 Piece Flow)
- Include Sub-Assemblies method
- Add In-Process Quality techniques



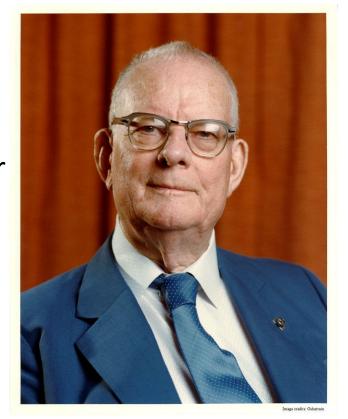






### White Bead Company - Variability

- Positions Available:
  - 3 Qualified Designers
  - 1 Quality Control Inspector
  - 1 Quality Control Supervisor
  - 1 Company Accountant



Here at the White Bead Company, we take our customers' need for unparalleled quality and craftsmanship seriously. Our reputation is in your hands.

Welcome aboard.

J. M. Watching







### White Bead Day 1 - Training

,	EMPLOYEE NAME	1	2	3	4	5	Total
1							
2							
3							
4							
5							
6							
•	TOTALS						

- Training Session Agenda:
  - Standard Operating Procedures
  - Quality Expectations
    - No Defects
  - Testing Criteria
  - Accounting Procedures
- Out to the Shop Floor!







Is our #1 Goal







# THERE'S ALWAYS ROOM FOR

### IMPROVEMENT







### **Quality Matters**

### Hit the Mark!

Or hit the road...







REWARD: \$5

### Quality Competition









### TAKE PRIDE IN YOUR WORK

## NO MORE THAN FOUR

STOP AND THINK ABOUT QUALITY







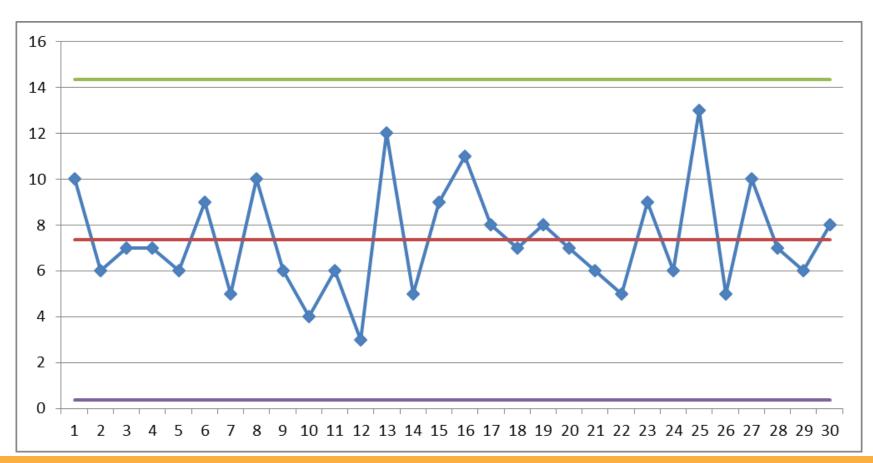
		F						
	EMPLOY	EE NAME	1	2	3	4	5	Total
1								
2								
3								
4								
5								
6								
Bea	d Ltd, Inc.	TOTALS						

White





### White Bead Company Results









### Switching Game – Complexity and Changeovers

- Goal:
  - Demonstrate the impact on productivity and quality when we frequently shift from task to task
- Use 4 different common strategic games
- 1 champion against 4 opponents
- <u>Time and count</u> the moves of each combatant
- Switch periodically









### Complexity Challenge

	Round 1
Products	2 Shapes
Processes	2 Colors
Markets	2 Cities

There are 10 simple orders to be filled for 2 locations

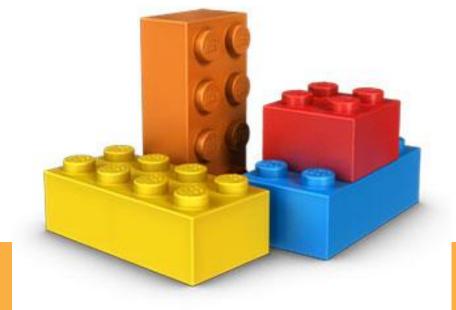
#### Packages:

- Large
- Small

#### **Products:**

- White
- Yellow





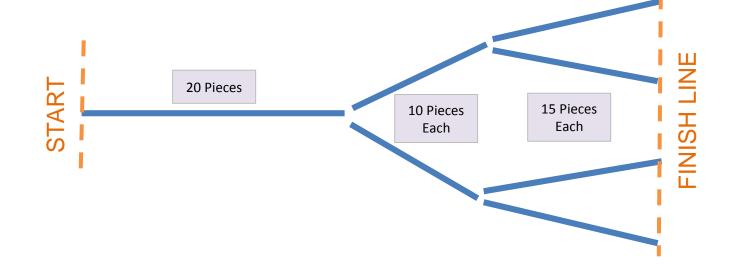






### Domino Setup Challenge – Kata Learning

- 100 dominos arranged as directed in 60 seconds
- Teams of 3 to 5 players typically
- Use the PDCA cycle to make key improvements
- Practice <u>Kata Coaching</u> of the participants
- Document progress over successive cycles







### Bolt Building Challenge – Standard Work

- 2 Contestants go "head-to-head"
- Duplicate the Prime Specimen
- Discuss Impediments to Success
- Find 2 new Contestants for Round 2
  - Use Standard Build Template
- Compare and Discuss the Results
- Develop Additional Solutions









### Leading on the Edge

- Using Games in our Learning Programs can
  - Increase the enthusiasm and engagement of the participants
  - Break up an otherwise long class
  - Make difficult concepts understandable and memorable
  - Provide a means for us to model and experiment with a process
  - Make learning more fun







#### **Thank You!**

Your opinion is important to us!

Please take a moment to complete the survey using the conference mobile app.

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