## NSTRUCTION 2021<sup>TH</sup>/<sub>AS</sub> CONVEN



#### Using Lean Thinking to Bridge the Field-Office Gap

#### Earn CE hours for this Session

Participants must:

- 1. Sign in using attendance sheet in the back of the room.
- 2. Attend at least 95% of the session.
- 3. Complete the session and post-program evaluation.

Additional instructions will be emailed to attendees requesting CE credits. If requesting AIA credits, please provide your AIA number so we can report your attendance. For questions regarding continuing education credits, please contact **Jo-Anne Torres**, Manager of Professional Development and Continuing Education, at jo-anne.torres@agc.org, or (703) 837-5360.



#### Earn CE hours for this Session





**1.0 AIC CPD Credit** | AGC of America has been approved to offer Continuing Professional Development (CPD) credits for qualifying programs by the <u>American Institute of</u> <u>Constructors</u> (AIC).

AIA Continuing Education Provider **1.0 AIA Learning Unit (LU)** | The Associated General Contractors of America is a registered provider of AIA-approved continuing education under Provider Number G523. All registered AIA CES Providers must comply with the AIA Standards for Continuing Education Programs.



AGC of America is registered with the National Association of State Boards of Accountancy (NASBA) as a sponsor of continuing professional education on the <u>National Registry of CPE</u> <u>Sponsors</u>. This session is designated for **1.0 CPE credit** in the field of Production.



**1.0 CM-Lean CE Credit** | AGC of America recognizes the Annual Convention as qualifying for continuing education hours towards the renewal of AGC's Certificate of Management-Lean Construction (CM-Lean).



Using Lean Thinking to Bridge the Field-Office Gap

#### **Learning Objectives**

By the end of this session, participants will be able to:

- 1. Review basic understanding of the true tenants of Lean Construction.
- 2. Discuss how company culture allows the organization to foster a safe work environment where all employees can contribute to the company's success.
- 3. Examine the beliefs we have about craftworkers and how our current beliefs impede communication.
- 4. Explore a framework of ideas to improve employee engagement and satisfaction.



Workers Negotiating with Boss Zsigmond Pollak - 1872

# How does your company get paid?

#### Ellis Armstrong (1968)

Three workmen were cutting stone for a structure and gave different answers to an inquiry as to what they were doing. One stated he was working for \$4 an hour; one said he was shaping a rock: the other stated he was building a Cathedral to his God. Which do you think was doing the best job and which was the happy man?

#### Cause(s) of Field Office Gap



- Communication
- Technology

 The True Cause goes much deeper than Communication

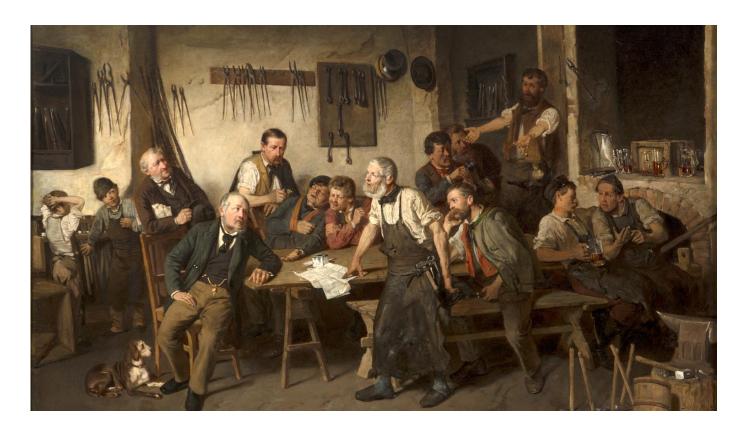




#### **Thinkers vs Doers**



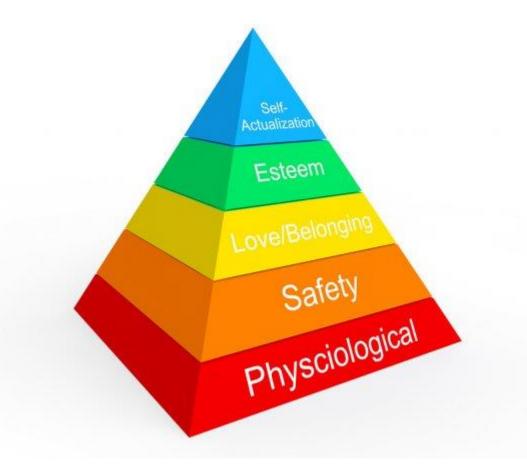
- Thinkers: Salaried Staff
  - Higher educated
  - Guaranteed paycheck
- Doers: Field Staff
  - Less educated
  - Hourly work
  - Layoffs when work is scarce





#### **Maslow's Hierarchy of Needs**





- 1. Physiological
  - Pay a living wage
- 2. Safety
  - Safe from injury
  - Job security
- 3. Love/Belonging
  - I am accepted as part of the team
- 4. Esteem/Mattering
  - Do I make a difference?
- 5. Self-Actualization



#### **Biggest Issue in Construction Industry**

- Insufficient number of craftworkers
- Why do we continue to treat workers the same way we did decades ago?
  - Layoff when work is scarce
  - UNSAFE work environment (mentally)
- Workers are not an Asset (these are things you own)
- Workers are our Most Important Resource

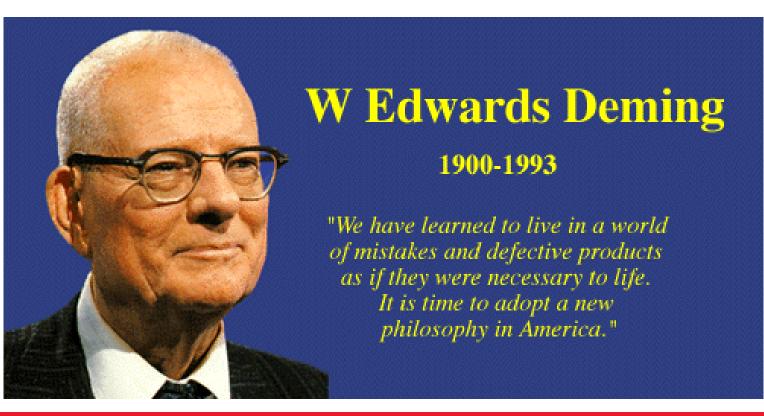




#### What is Lean?



- Lean coined by Womack
- Based on Management System developed by W. Edwards Deming
  - 14 Points
  - Deadly Diseases





#### Lean Construction

Two basic tenants of Lean Construction

- 1. Respect for People
- 2. Continuous Improvement

Goals of Lean

- Reduce waste and improve value
- Increase Customer satisfaction

Who is the Customer?



Most employed lean tools: Pull Schedule & Last Planner

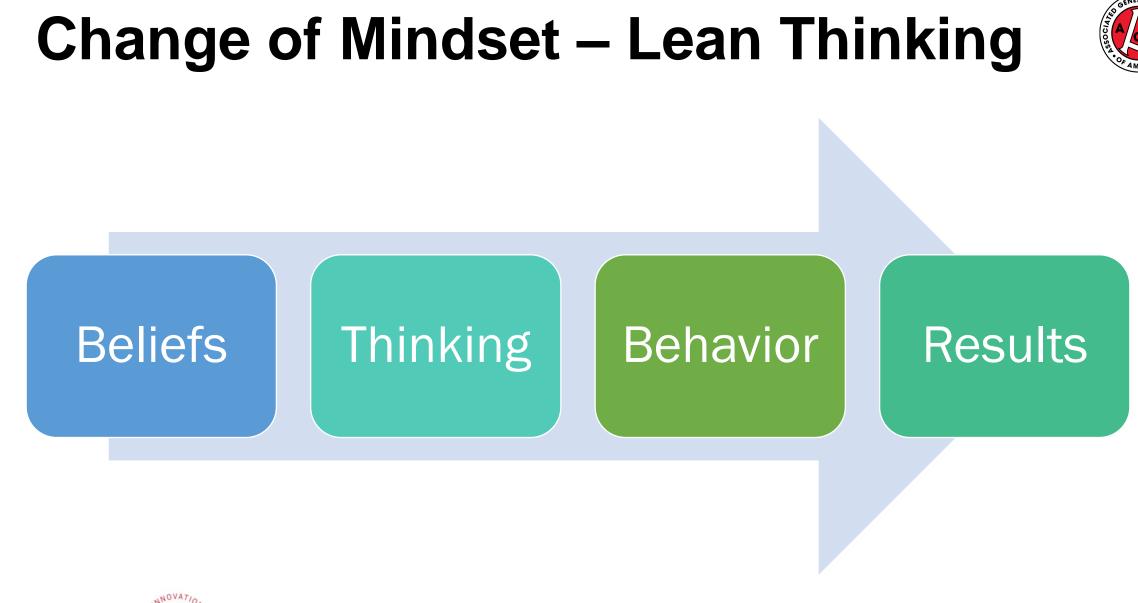
• Are we implying that the productivity problem in construction lies in the field?



## Respect for People

Do you believe your workers show up everyday to do quality work safely and productively?







## Respect for People

- People as our greatest resource
  - How do we show respect to our people?
  - How do we leverage this resource to improve our company?
  - What changes do we need to nurture this resource?



#### **Showing Respect**



- Do you care about your people 24/7?
  - We want our employees to go home the way they showed up
  - Do you want them to show up tomorrow the way they went home?
- Teaching life-skills that translate to work
  - Communication
  - Teamwork
  - Construction Supervisor Fundamental program at AGC
  - Examples
    - Vogel Bros Building Co.
    - Cornerstone One

#### Leveraging the Resource

- Allow workers to have input on processes
- Encourage process improvement ideas
- Avoid "Killer Statements"
- Hire for Brains, not just Backs



#### **Suggested Changes**

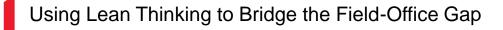


- Company Values (*belonging*)
- Motivate by understanding the WHY (purpose)
- Process Improvement ask for input (*mattering*)
- Fund improvement & education programs (growth)
- Gemba (for salary and hourly employees)
- Encourage learning
- Retained earnings (no layoffs?)



#### Summary

- Lean focus on the 2 tenants
  - 1. Respect for people
  - 2. Continuous improvement
- What you Believe matters
- Craft workers are a resource
  - Safe
  - Belonging
  - Mattering
- Encourage Improvement and fund it!
- Educate life skills translate to work skills









AG

### **Questions & Comments**

#### THANK YOU!

Mark Rounds Assistant Professor, CAECM Department Milwaukee School of Engineering rounds@msoe.edu