

24<sup>TH</sup> ANNUAL



24<sup>TH</sup> LCI CONGRESS  
OCTOBER 18-21

# Our Enterprise-wide Journey to Digital LPS<sup>®</sup> Documentation

Lauren Avalos Gonzalez and Grant Lanham, Alberici  
Melanie Gilbertson and Bryan Bova, Flintco

LEAN GUMBO: THE RIGHT INGREDIENTS FOR PROJECT SUCCESS

October 19, 2022



# Introductions and Overview





# Introductions



**Melanie  
Gilbertson**  
*Director of  
Production Support*



**Lauren Avalos  
Gonzalez**  
*Lean Engineer*



**Bryan Bova**  
*Project Manager*



**Grant Lanham**  
*Lean Engineer*



# Learning Objectives

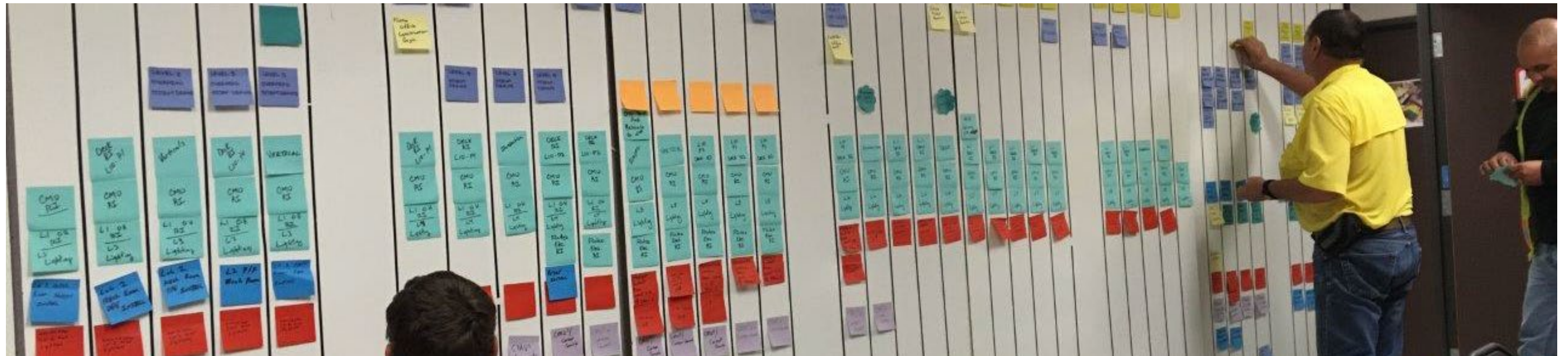
- What motivated us to pursue a digital solution
- Pros and cons of analog format
- Criteria and road map to select a digital solution
- How we're using digital LPS® documentation today
- What you should know





# Problem Statement

Maintain behaviors resulting from LPS® use in analog format while easing administrative burdens on our project teams





# Motivation to Pursue a Digital Solution





# Enterprise Perspective





# A Tale of Two Lean Programs



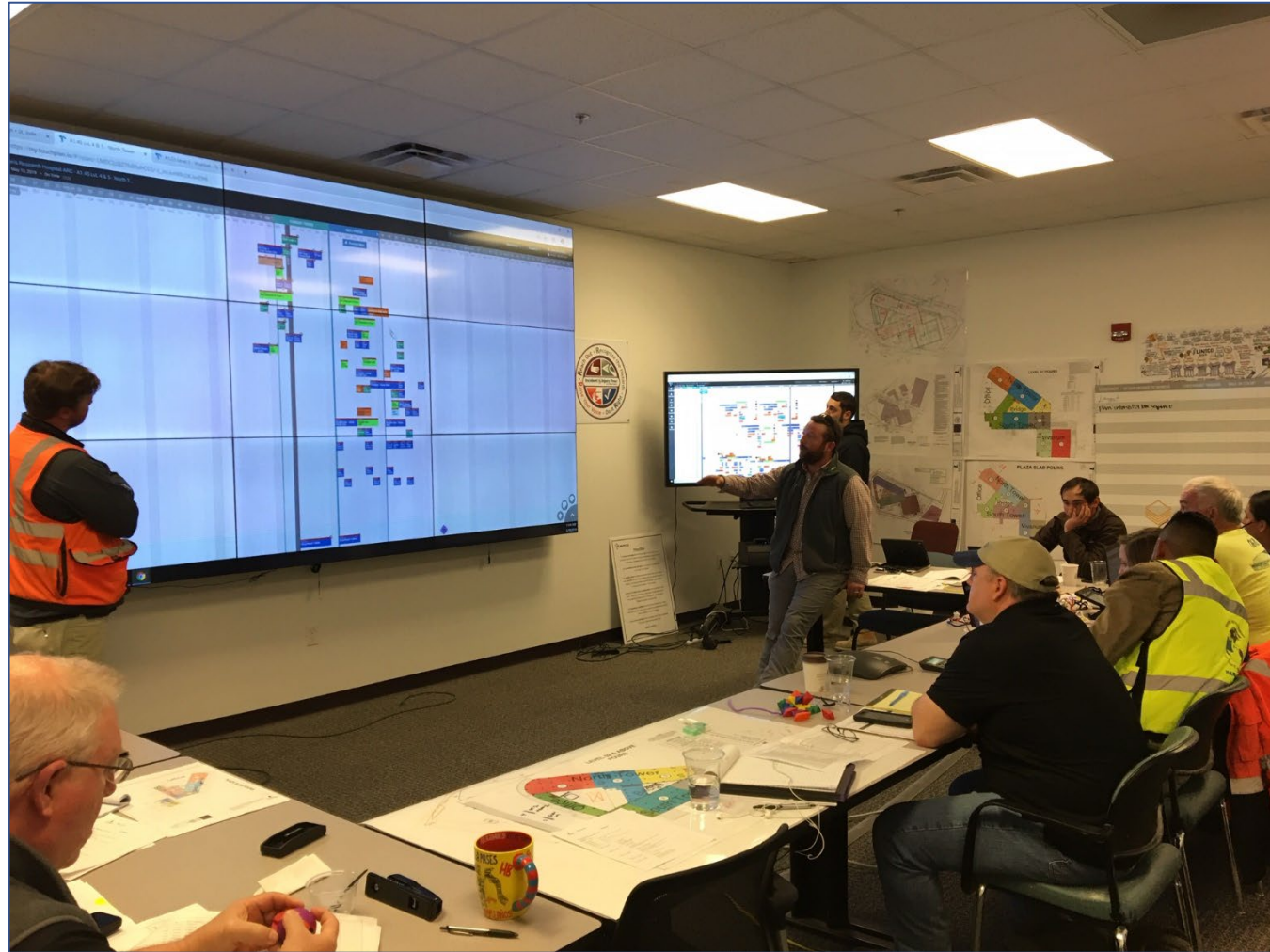


# Pros and Cons of Analog Format





# Meetings



# Data Collection

Project Insights - 21050 Crystal Bridges Phase #2

PPC by Week

PPC Variance Reasons

Account Insights (Sector)

PPC Insights

Health Insights

Ticket Insights

Project List

30 Active Projects

38 Total Projects

264 Overdue Tickets

48% Account PPC

36% Account Health

4 Projects Late

47% Benchmark PPC

46% Benchmark Health

18 days ahead Median Schedule Status

Market Sector Health

Top Performers - Account

WEEKLY WORK PLAN


| FLOOR | BATCH   | ASSIGNMENT DESCRIPTION                                  | ORGANIZATION | RESPONSIBLE PARTY | COMMENTS | STARTING ON | 11/16/19 | Week # |    |     |     |     |
|-------|---------|---|--------------|-------------------|----------|-------------|----------|--------|----|-----|-----|-----|
| LL    | Kitchen | Lower level identify and correct pre punch and QC items | Boelter      | Bob               |          | Mon         | Tues     | Wed    | Th | Fri | Sat | Sun |
| LL    | Kitchen | Cafe install walk in refrigeration systems              | Boelter      | Bob               |          | x           | x        | C      |    |     |     |     |
| LL    | E       | Rough in MDF/TDR power/rounding                         | GECCO        | Mike K            |          | x           | x        | x      | x  | x   |     |     |

WEEKLY WORK PLAN

| FLOOR | BATCH | ASSIGNMENT DESCRIPTION                         | ORGANIZATION | RESPONSIBLE PARTY | COMMENTS               | STARTING ON | 11/16/19 | Week # |    |     |     |     |
|-------|-------|--|--------------|-------------------|------------------------|-------------|----------|--------|----|-----|-----|-----|
| GL    | C     | Remove temp riser in Area C                    | GECCO        | Tim B             |                        | Mon         | Tues     | Wed    | Th | Fri | Sat | Sun |
| GL    | B     | Install low voltage wall trim in area B        | GECCO        | Mike Bryan        |                        | x           | x        | C      |    |     |     |     |
| GL    | A     | Install flooring in misc rooms                 | FSI          | RMAYO             | sd lights turned on ST | x           | x        | x      |    |     |     |     |
| GL    | A     | Drop Ceiling Tile                              | GECCO        | Mike Bryan        |                        | x           | x        | x      |    |     |     |     |
| GL    | West  | Casework and wall protection                   | Square up    | Todd Y            |                        |             |          |        |    |     |     |     |
| GL    | D     | Drop Ceiling Tiles                             | TJ/Niehaus   | Charlie           |                        | x           | x        | x      |    |     |     |     |
| GL    | E     | Install OFCI equipment in area E               |              |                   |                        |             |          |        |    |     |     |     |
| GL    | F     | Install OFCI equipment in area F               |              |                   |                        |             |          |        |    |     |     |     |
| GL    | E     | PLUMBING FIXTURES                              |              |                   |                        |             |          |        |    |     |     |     |
| GL    | E     | Install ceiling grid - Outside of batch plan   |              |                   |                        |             |          |        |    |     |     |     |
| GL    | F     | Install low voltage wall trim in 1H1           |              |                   |                        |             |          |        |    |     |     |     |
| GL    | F     | Install Flooring                               |              |                   |                        |             |          |        |    |     |     |     |
| GL    | F     | Casework and wall protection                   |              |                   |                        |             |          |        |    |     |     |     |
| GL    | C     | Install low voltage wall trim in 1H2           |              |                   |                        |             |          |        |    |     |     |     |
| GL    | C     | Install panel interiors and trim out           |              |                   |                        |             |          |        |    |     |     |     |
| GL    | C     | Install low voltage wall trim in 1H3           |              |                   |                        |             |          |        |    |     |     |     |
| GL    | C     | Install SS Pass Through                        |              |                   |                        |             |          |        |    |     |     |     |
| GL    | C     | Install Wall Protection                        |              |                   |                        |             |          |        |    |     |     |     |
| GL    | C     | Install wall Protection                        |              |                   |                        |             |          |        |    |     |     |     |
| GL    | C     | Install and wire center light fixtures         |              |                   |                        |             |          |        |    |     |     |     |
| GL    | C     | Drywall Cover outside of batch plan            |              |                   |                        |             |          |        |    |     |     |     |
| GL    | C     | Drywall Cover                                  |              |                   |                        |             |          |        |    |     |     |     |
| GL    | C     | Install and wire center light fixtures         |              |                   |                        |             |          |        |    |     |     |     |
| GL    | C     | Frame soffits                                  |              |                   |                        |             |          |        |    |     |     |     |
| GL    | C     | Drywall Cover                                  |              |                   |                        |             |          |        |    |     |     |     |
| GL    | C     | Drywall Cover                                  |              |                   |                        |             |          |        |    |     |     |     |
| GL    | C     | Overhead conduit                               |              |                   |                        |             |          |        |    |     |     |     |
| GL    | C     | Overhead conduit/wall rough                    |              |                   |                        |             |          |        |    |     |     |     |
| GL    | C     | PIPING MED GAS BOOMS                           |              |                   |                        |             |          |        |    |     |     |     |
| GL    | C     | Pre-batch firestop all in-wall & above ceiling |              |                   |                        |             |          |        |    |     |     |     |

WEEKLY V

| FLOOR | BATCH    | ASSIGNMENT DESCRIPTION                                   | ORGANIZATION          | RESPONSIBLE PARTY | COMMENTS             | STARTING ON | 11/16/19 | Week # |   |   |  |  |
|-------|----------|--|-----------------------|-------------------|----------------------|-------------|----------|--------|---|---|--|--|
| L2    | E        | Terminate 144 strands fiber x2 going to MTR1             | TSI                   | JOE               |                      |             |          |        |   |   |  |  |
| L2    | E        | Test 288 strands of fiber from MTR2 to MTR1              | TSI                   | JOE               |                      |             |          |        |   |   |  |  |
| L2    | E        | Install Ceiling grid                                     | TJ/Niehaus            | Charlie           |                      |             |          |        |   |   |  |  |
| L2    | NW       | Pull temp network for Trane system                       | GECCO                 | Brian R           |                      | x           | x        | x      | x | x |  |  |
| L2    | ELEVATOR | 1-4 Lobby ceiling rough in                               | GECCO                 | GLEN              |                      | x           | x        | x      | x | x |  |  |
| L2    | NORTH    | Lighting / Devices                                       | GECCO                 | GLEN              |                      | x           | x        | x      | x | x |  |  |
| L2    | NORTH    | Mechanical room lighting                                 | GECCO                 | GLEN              |                      | x           | x        | x      | x | x |  |  |
| L2    | CORE     | Lighting / Devices center rooms                          | GECCO                 | GLEN              |                      | x           | x        | x      | x | x |  |  |
| L2    | U        | MDF room branch circuits                                 | GECCO                 | RODD              |                      | x           | x        | x      | x | x |  |  |
| L2    | Center   | Install low voltage ceiling devises in center area       | GECCO                 | Mike Bryan        |                      | x           | x        | x      | x | x |  |  |
| L2    | North    | Piping AHU HUMIDIFIERS                                   | MURPHY                | CHAD K            |                      | x           | x        | x      | x | x |  |  |
| L2    | North    | cove prime membrane top finish                           | Desco                 | Mike Lowrie       |                      | x           | x        | x      | x | x |  |  |
| ALL   | STAIR    | Stair 2 rough in (6-8)                                   | GECCO                 | RYAN H            |                      | x           | x        | x      | x | x |  |  |
| ALL   | STAIR    | Stair 2 Inspection (1-6)                                 | GECCO                 | RYAN H            |                      | x           | x        | x      | x | x |  |  |
| ALL   | STAIR    | Fire seal in-wall penetrations in Stair 2&4 (all levels) | Rebel                 | Dave Blattner     | on of GECCO rough in | x           | x        | C      |   |   |  |  |
| ALL   | STAIR    | Stair 1 Prime and 1st Coat                               | All American Painting | Ben               |                      | x           | x        | x      | x | x |  |  |
| ALL   | STAIR    | Stair 3 Hang soffits and hard ceilings                   | TJ/Niehaus            | Mark              |                      | x           | C        |        |   |   |  |  |
| ALL   | STAIR    | Tape and Finish Stair 3                                  | TJ/Niehaus            | Erik              |                      | x           | x        | x      | x | x |  |  |
| ALL   | STAIR    | Stair 4 Inspection (6- PH)                               | GECCO                 | RYAN H            |                      | C           |          |        |   |   |  |  |
| ALL   | STAIR    | Drywall Cover Stair 4                                    | TJ/Niehaus            | Mark              |                      | x           | x        | x      | x | x |  |  |
| ALL   | STAIR    | Drywall Cover Stair 4                                    | TJ/Niehaus            | Mark              |                      | x           | x        | x      | x | x |  |  |
| ALL   | ELEVATOR | L8 1-4 Lobby rough in                                    | GECCO                 | RYAN S            |                      | x           | x        | x      | x | x |  |  |
| ALL   | ELEVATOR | L7 Elevator 1-4 Lobby rough in                           | GECCO                 | RYAN S            |                      | x           | x        | x      | C |   |  |  |
| ALL   | ELEVATOR | L6 Elevator 1-4 Lobby rough in                           | GECCO                 | RODD              |                      | x           | x        | C      |   |   |  |  |
| ALL   | ELEVATOR | EH 1-4 Drywall Cover Ceilings                            | TJ/Niehaus            | Mark              |                      | x           | x        | x      | x | x |  |  |
| ALL   | ELEVATOR | EH 6-10 Tape and Finish                                  | TJ/Niehaus            | Tim               |                      | x           | x        | x      | x | x |  |  |
| ALL   | ELEVATOR | Install EH 12  | Obs                   |                   |                      | x           | x        | x      | x | x |  |  |
| ALL   | ELEVATOR | Charlie Rooms Tape and Finish                            | TJ/Niehaus            | Tim               |                      | x           | x        | x      | x | x |  |  |
| ALL   | ELEVATOR | Family Lounge soffit Tape and Finish 7 & 8               | TJ/Niehaus            | Erik              |                      | x           | x        | C      |   |   |  |  |

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# Visual Communication





# Criteria and Road Map for a Digital Solution





# Road Map to a Solution | Flintco



# Road Map to a Solution | Alberici





# TPRC Process



# Our Current State Today





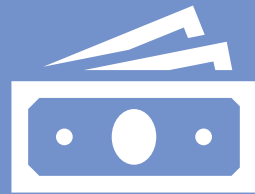
# Enterprise Project Statistics



**LEANEDGE** >

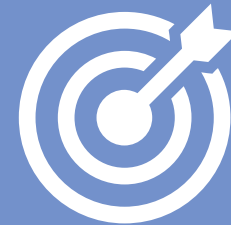
123

No. Lean Projects  
Completed



\$2.9B

Total Value of completed  
Lean Projects



77%

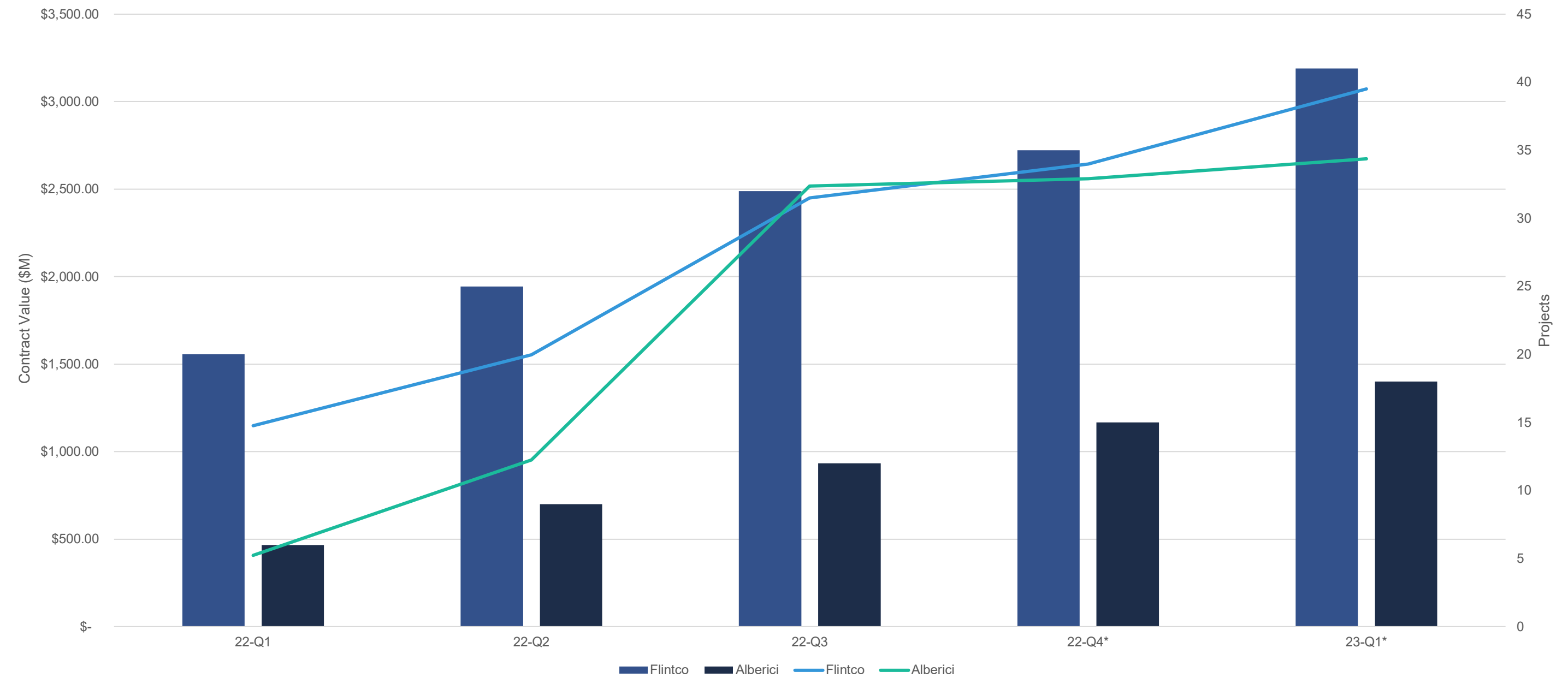
Lean Projects Met  
Expectations



83%

Active Projects  
using Lean

# Digital Solution Adoption





# What You Should Know



# Summary

## Enterprise

multiple companies with different markets and partners

- Look for a transparent culture that feels customer-focused to you during conversation; ideally, they'll also have customer advisory board
  - An open API ensures your digital platform integrates with your data

Education | Hospitality | Civic | Healthcare  
Southwest, South and Central USA  
Non-union

- Training partners requires effort and capacity from project teams they may not have
- Adopting in business unit shows how you scale for multiple types of projects

Industrial | Civil | Energy | Megaprojects  
North and Midwest USA | Canada | Mexico  
Union

- Trade partner sophistication differs by market/country
- Heavily detailed CPM schedule integration with digital Last Planner System can be challenging





# What You Should Know If You Are...

| New to Lean  | LPS® User, But Not Digitally  | Digital LPS® User   |
|--|---|---|
| <ul style="list-style-type: none"> <li>• Commitments are required: Cost, Space, Training, Tech Adoption, Trades</li> <li>• Touchplan ≠ LPS® <i>but it <u>can</u> make it easier to adopt</i></li> <li>• Get your executive team involved in the metrics</li> </ul> | <ul style="list-style-type: none"> <li>• Watch out for false perception that collaboration in danger with digital; it actually encourages collaboration</li> <li>• You still have to perform the elements that make for a good meeting to have a good meeting</li> <li>• Board space should be used for different visuals, not blank walls</li> </ul> | <ul style="list-style-type: none"> <li>• Clarify minimum requirements before researching software</li> <li>• Have clear expectations on CPM software integration</li> <li>• Know if trade access to create/status tickets is a key priority for your use</li> </ul> |

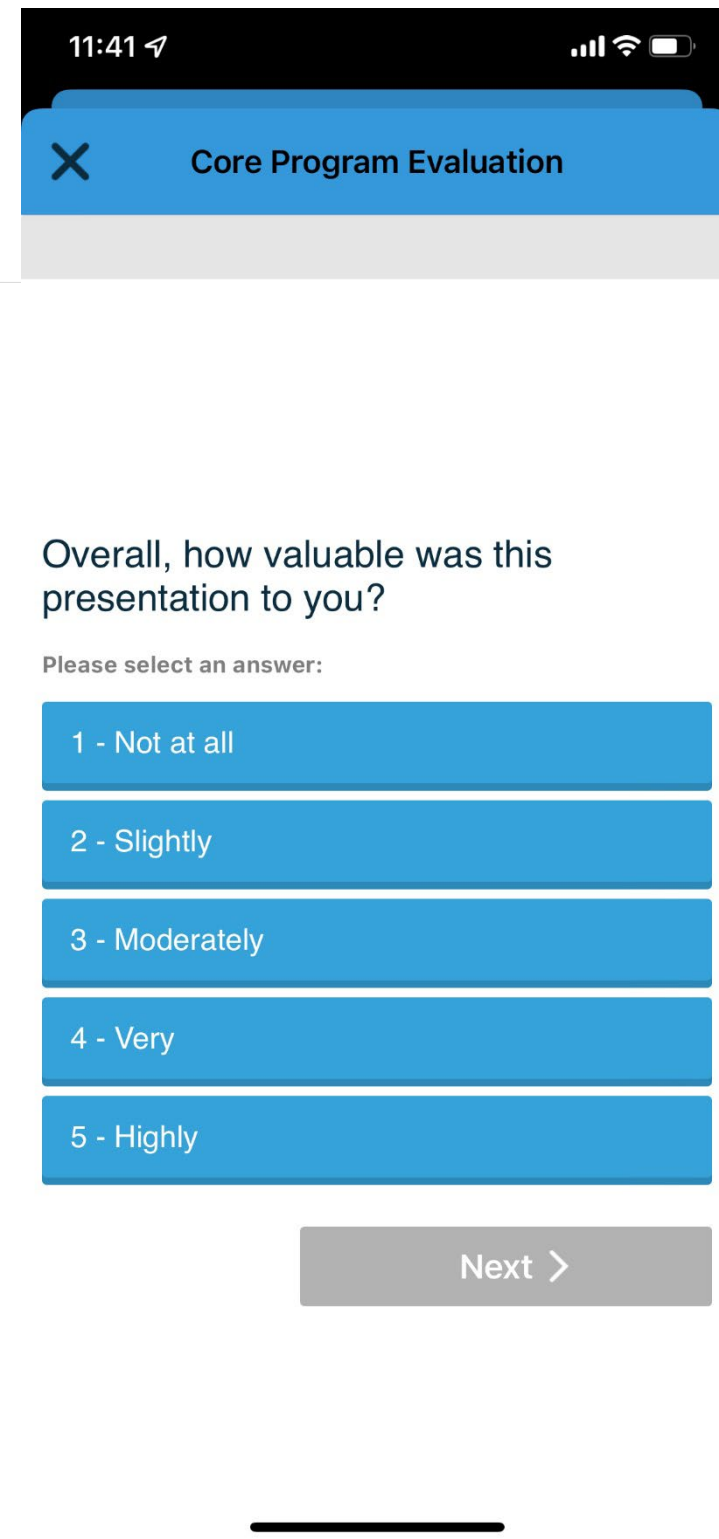
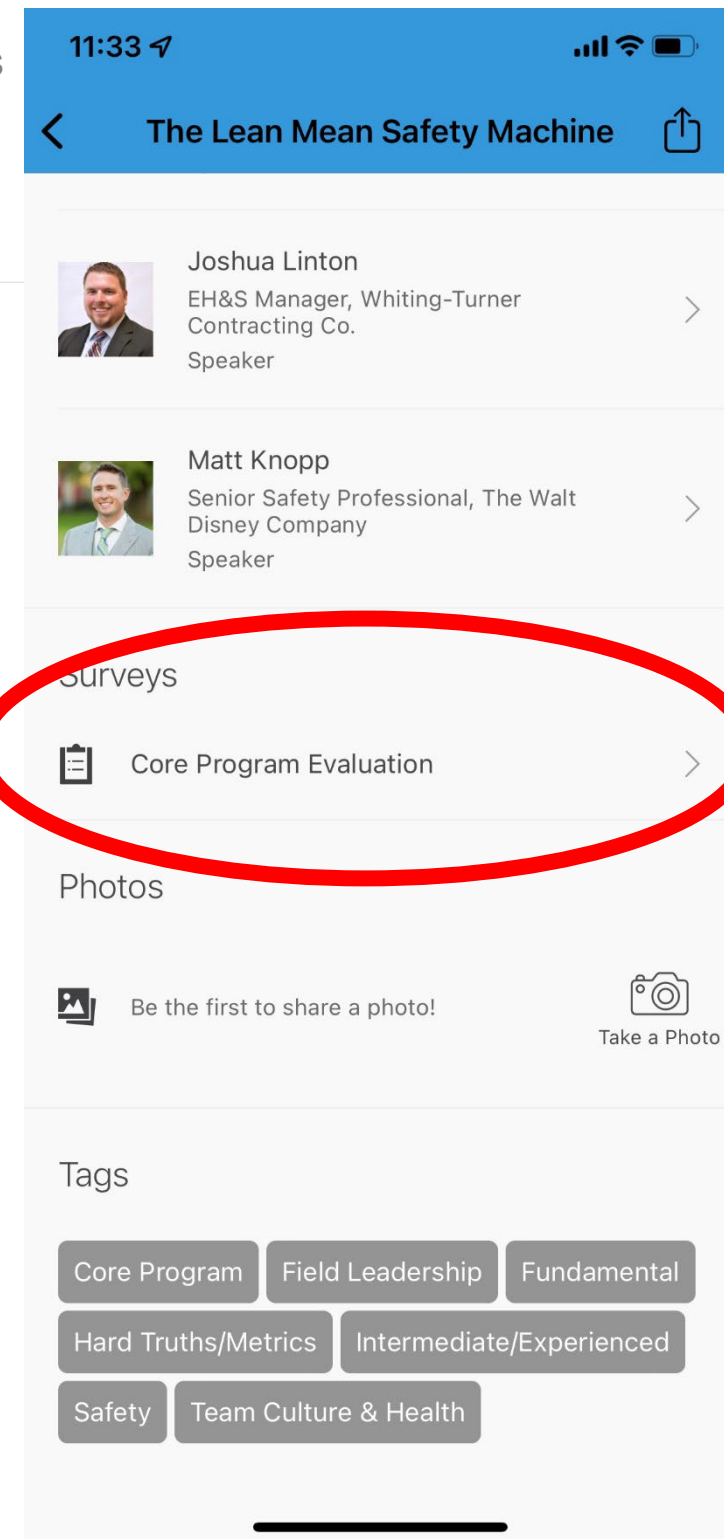


# Rate Presentations in the App

**Continuous improvement:** give presenters your feedback by taking the session evaluation!

1. Find the session under “schedule”
2. Click on it then scroll down
3. Click “core program evaluation”
4. Complete the 5-question evaluation

*This information will determine the top 5 presentation teams and the top Live Lab*







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**In the spirit of continuous improvement, we would like to remind you to complete this session's survey! We look forward to receiving your feedback.**





# Contact us!



**Melanie  
Gilbertson**  
*mgilbertson@flintco.com*



**Lauren Avalos  
Gonzalez**  
*lauren.ag@alberici.com*



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*bryan.bova@flintco.com*



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Thank you for attending this presentation. Enjoy the rest of the 24<sup>th</sup> Annual LCI Congress!

