

22ND ANNUAL



22ND LCI CONGRESS
OCTOBER 19-23

Small Projects Doing Big Things

Ian Bowen, Kaiser Permanente

Jessica Radecki, NBBJ (formerly with Clark / Kjos Architects)

Jason Shook, Howard S Wright Construction

THE ABC'S OF LEAN: TRANSFORMATION THROUGH ACTIONS, BEST PRACTICES AND COACHING

October 20, 2020

Presenters Intro



**Jessica
Radecki**

Healthcare Director, NBBJ
Formerly with Clark / Kjos
Architects



Jason Shook

Project Manager
Howard S. Wright
Construction

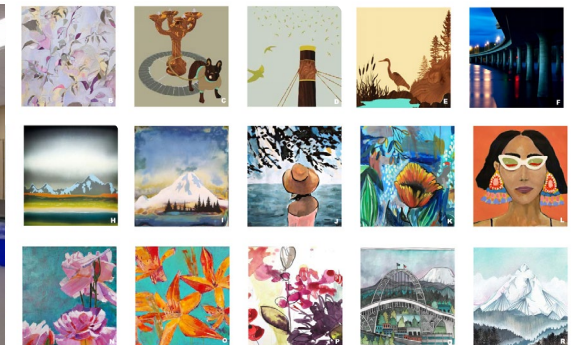


Ian Bowen

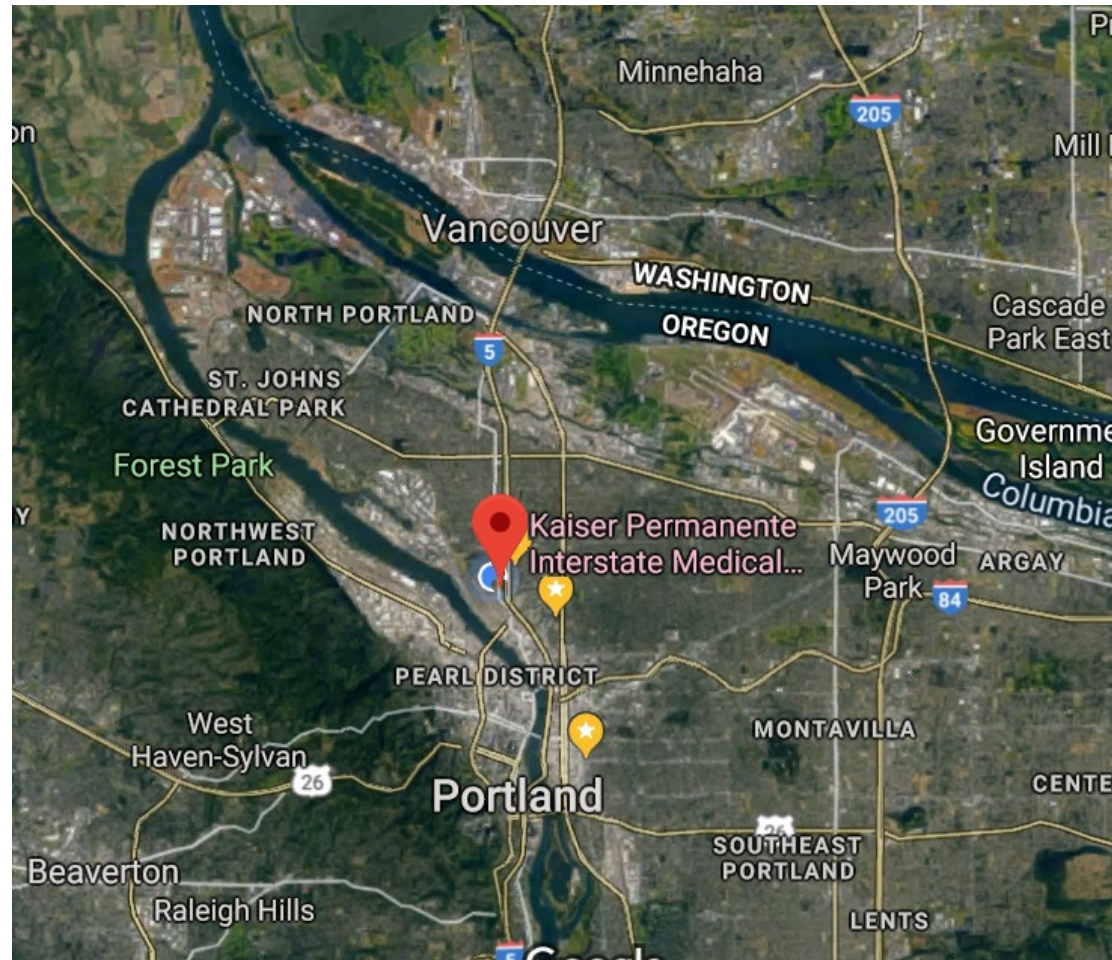
Sr. Project Manager
National Facilities
Kaiser Permanente

Agenda

- Project/Program Overview
- Metrics
- Does Your Environment Matter?
- DEEP DIVE
- Documentation
- Continuous Improvement



Introduction



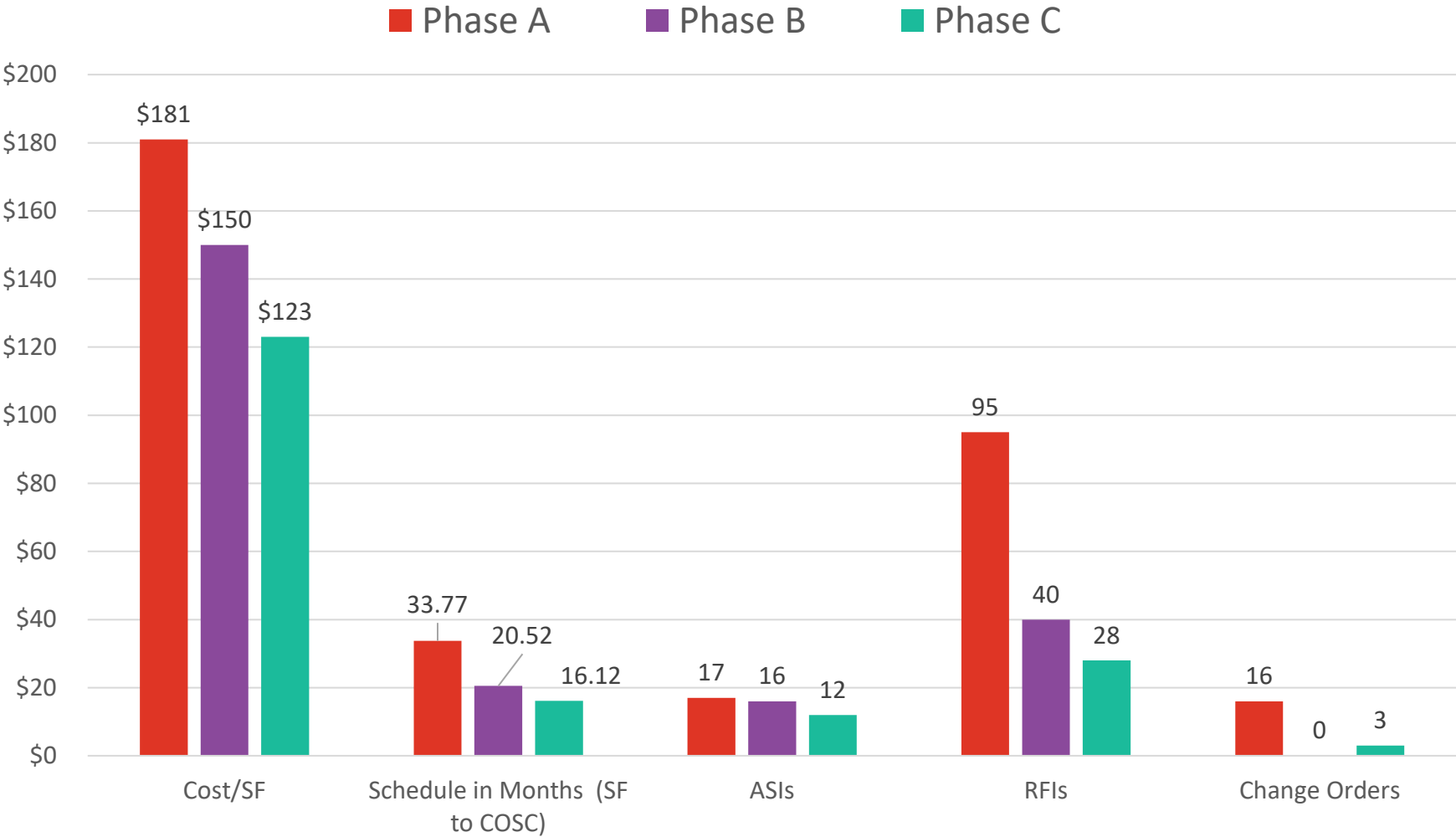
KAISER PERMANENTE INTERSTATE
MEDICAL CAMPUS
PORTLAND, OR



3 BUILDINGS, ~200,000 SF, BUILT 1978-1999
9 PROJECTS, DURATION 2015-2019

Metrics: Steady Improvement

Refresh Metrics



PHASE	SQ FT	ACTUALS/EAC	PHASES
A ¹	55,230	\$12,407,541	125
B	68,460	\$10,315,000	69
C	64,807	\$7,987,016	83

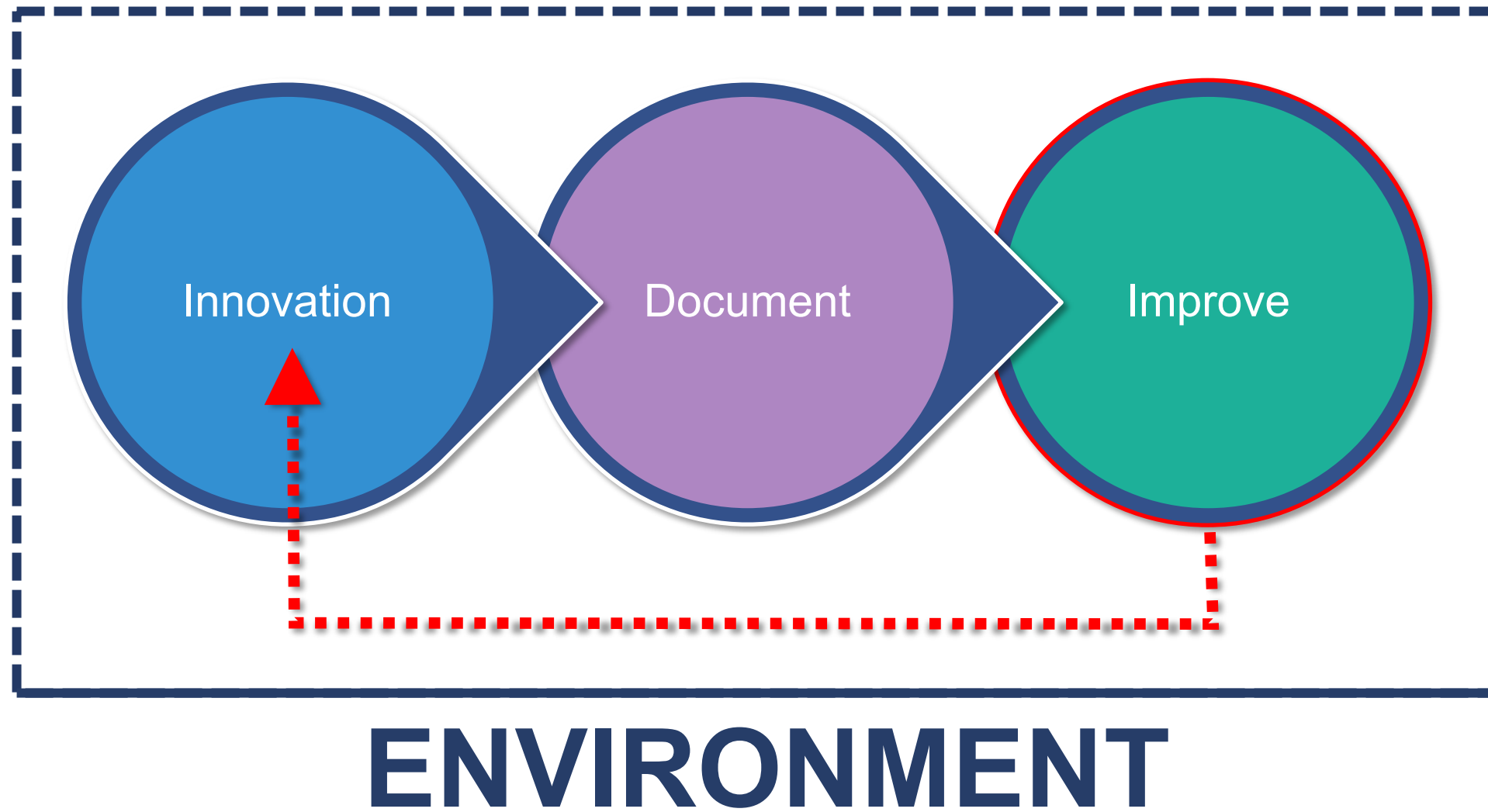
32% Reduction in Cost/SF
52% Reduction in Schedule Duration
71% Reduction in RFI's
29% Reduction in ASI's
81% Reduction in Change Orders

¹Budget has been normalized to account for scope differences

Setting the Stage



Hypothesis



Physical/Virtual Environment- “Little Room”



Weekly team OAC meeting

Daily Subcontractor Meetings



Psychological Environment

“Studies show that psychological safety allows for moderate risk-taking, speaking your mind, creativity, and **sticking your neck out without fear of having it cut off** — just the types of behavior that lead to market breakthroughs.”¹

Top 3 Tips:

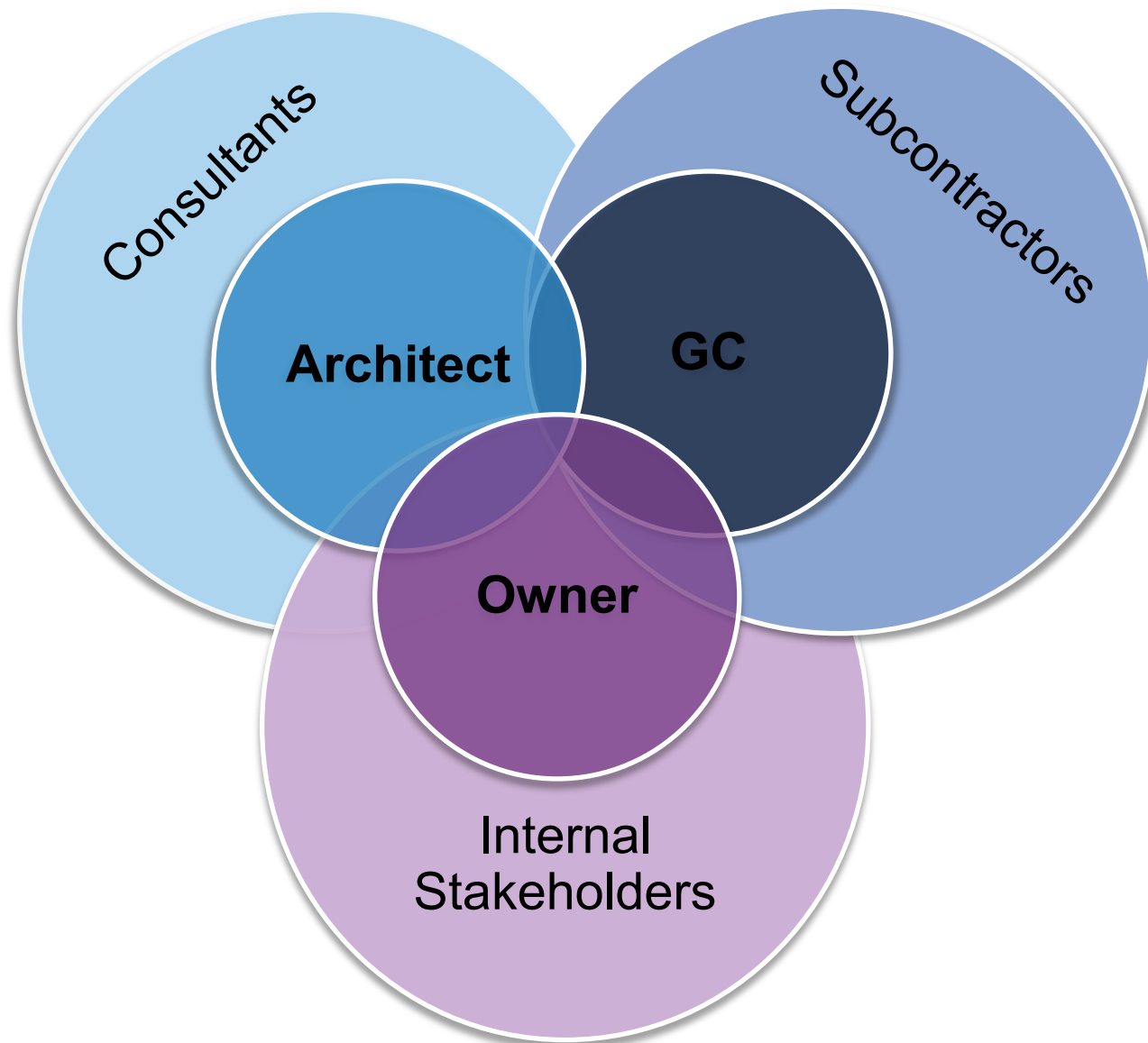
- Get to know each other
- Don't kill the messenger
- Challenging but not threatening



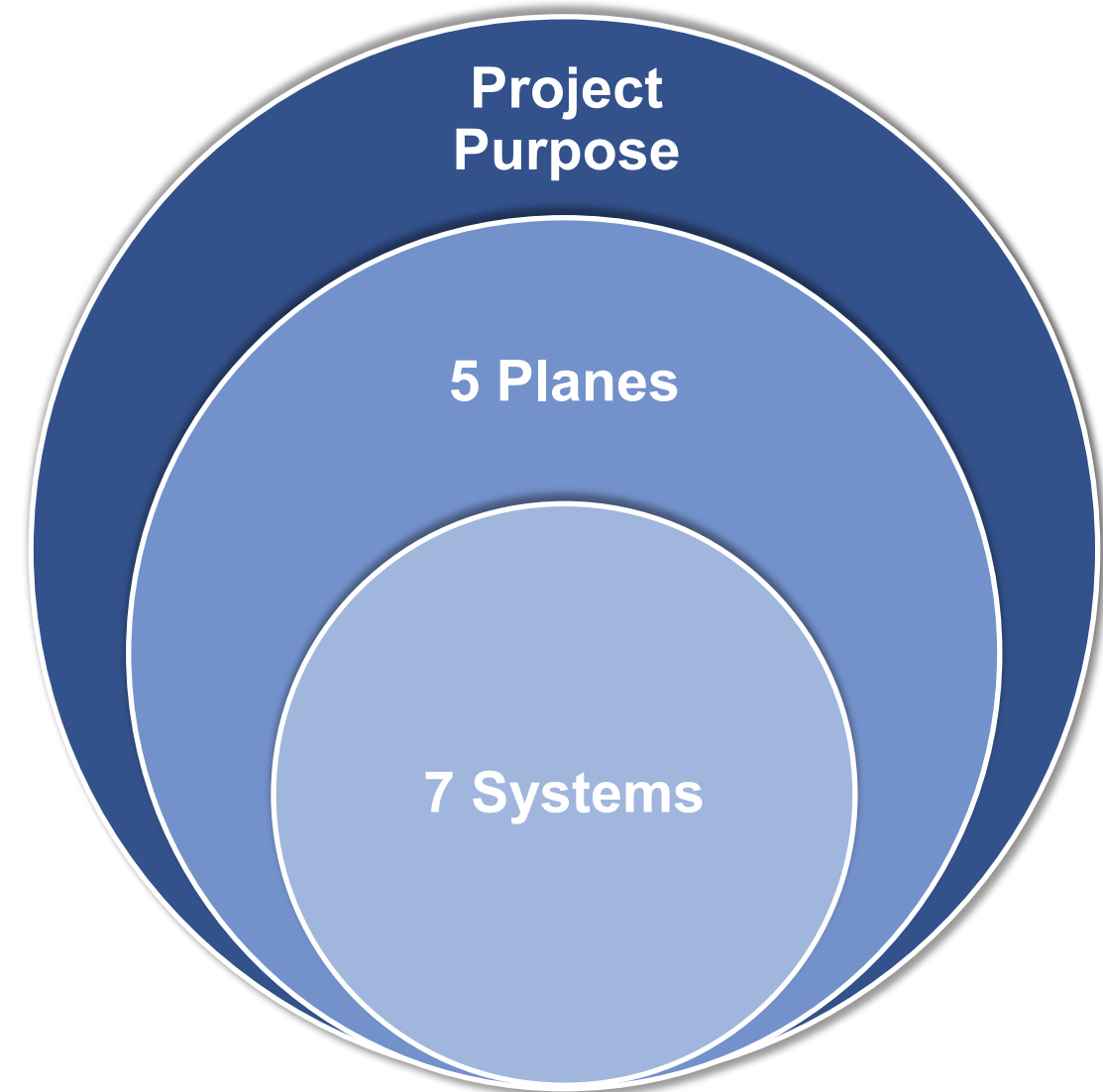
¹High-Performing Teams Need Psychological Safety. Here's How to Create It, Harvard Business Review, August 2017

Rules of Engagement

ROLES & RESPONSIBILITIES



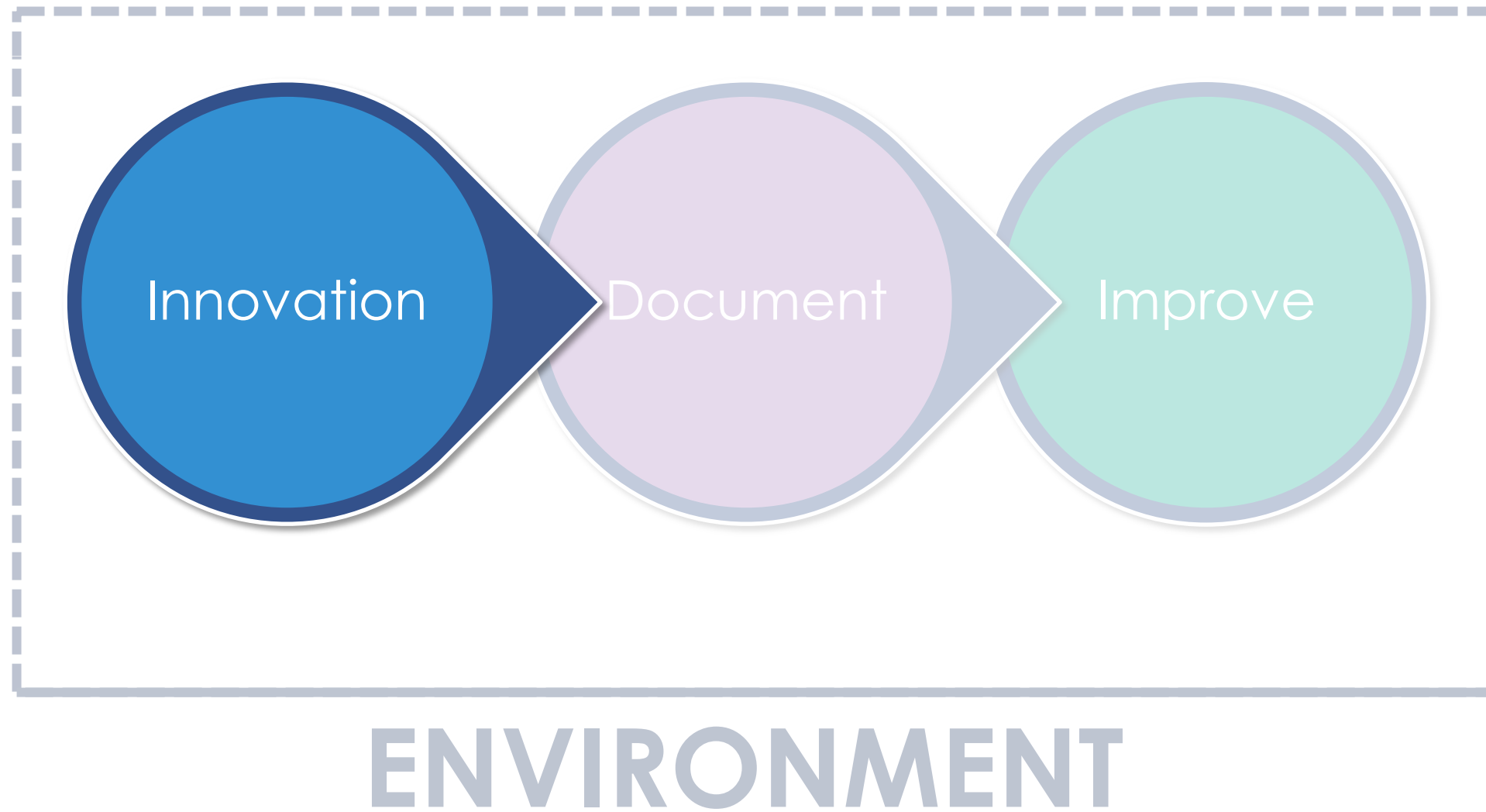
SCOPE



Open for Innovation



Innovation



Goals : Quality & Throughput

Quality

Throughput

Design

Great documents, a true reflection of what the Owner expects in the design

Construction

Meets Owner's expectations (cost, quality & schedule), zero punch list items, safe environment

Shortest Duration

Innovations

Quality & Throughput Goals in Action

Pre-Design Deliverable

- Level of Refresh Diagrams
- Furniture Inventory Diagrams
- Pre-Design Department Summaries

IGMP Deliverable

- Floor finish diagram with demo description for floor prep
- Furniture Plans and Spec Deliverables
- Schedules (Casework, flooring, plumbing, accessories, CFCI, OFCI, OFOI, etc)

User Interface

- **“Speed Dating” User Group Engagement**

Pre-Construction

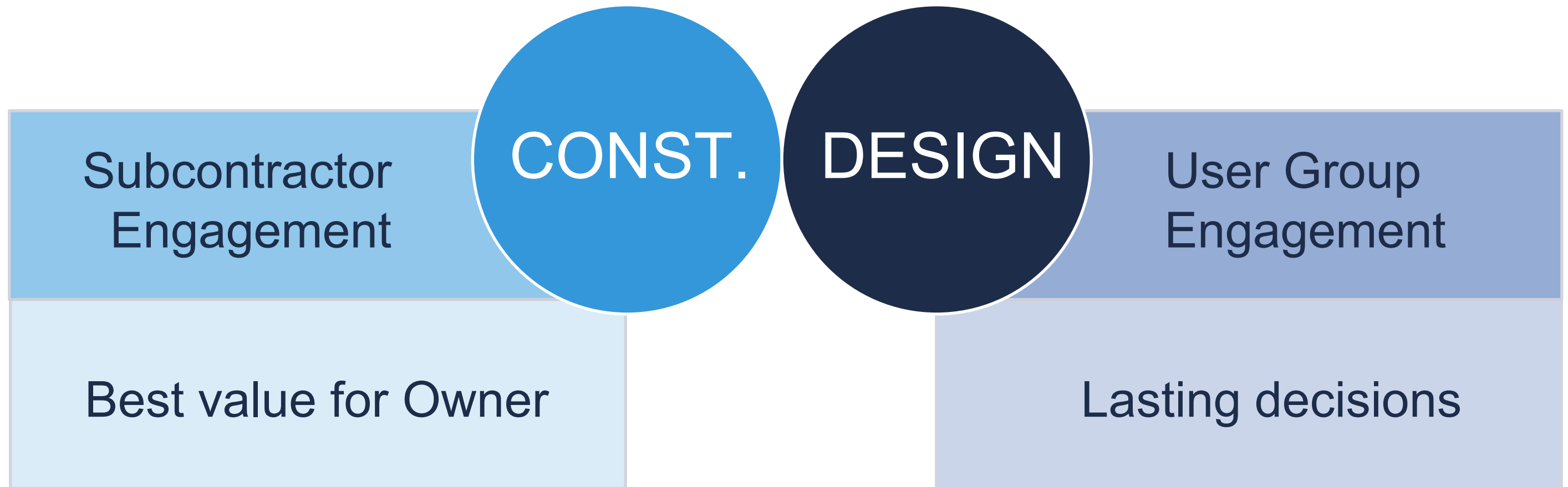
- **Matterport existing conditions survey**
- **Subcontractor early involvement**
- **Pre-construction submittal approval**
- **Last Planner System**

Construction

- Daily subcontractor pull plan sessions
- Move plan coordination meetings

Quality & Throughput

Deep Dive : Engagement



Get the Right “Who”

- **Subcontractor Selection**
 - Getting the right people, in the right place, for the right reason
 - RFP selection not solely based on cost, but based on the people
- **Combo Hard Bid & GMP – One Size Does Not Fit All**
 - Traditional Method – Hard Bid – Used for known scopes
 - GMP Method – Used for Unknown scopes
- **Risks:**
 - Need team alignment with a built team trust
 - Need good relationships with subcontractors
 - Need established protocols for tracking subcontractor hours

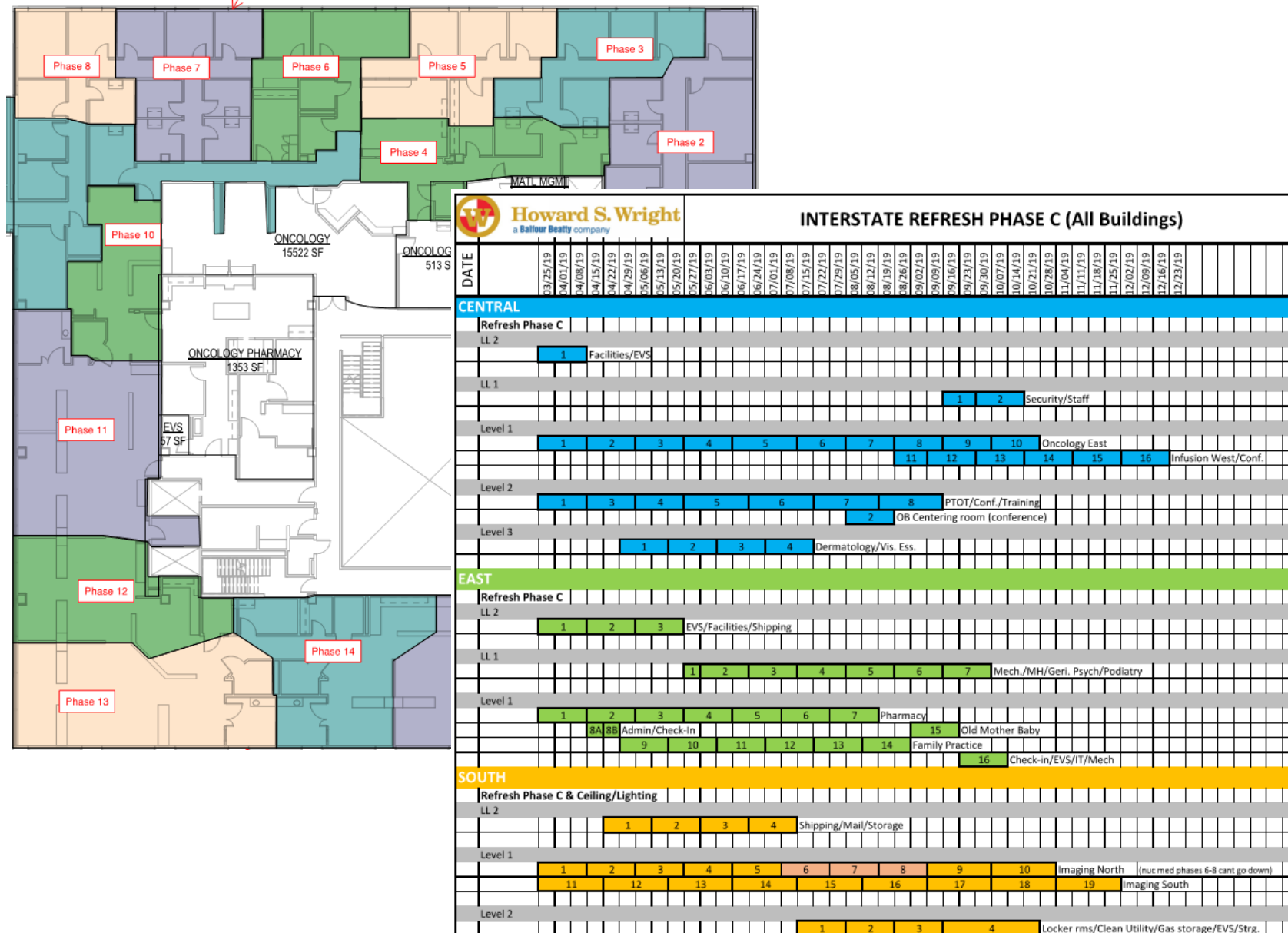
**\$450k savings
with GMP
strategy**

Understand the “What”



- Minimize interruptions to clinical departments
- Significant reduction in hours spent multiple walkthroughs
- Allows project team and building users to quickly visualize the actual space during meetings to assist in making real time design decisions

Align on the “How”



- Well established phase boundaries, overlap and timelines allow construction team to deliver project more efficiently.
- Allows subcontractors to better understand work-flow efficiency and provide labor resources as needed to cover each specific phase through the project duration
- Shows how separate projects overlap to further identify possible efficiency gains

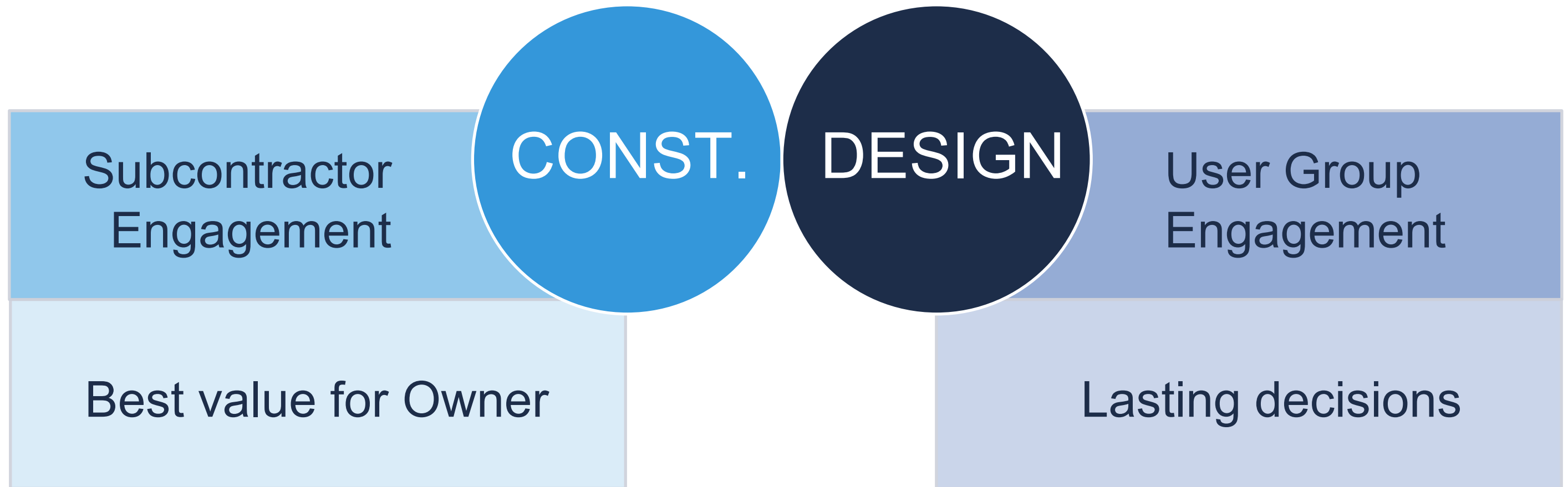
Realize the “When” as Predicted



- Utilized **Last Planner System** to hold Daily/Weekly look ahead meetings. Mandatory for all subcontractor trade Foreman
- **Subcontractors are bought in** on the project schedule from the very beginning
- Allows trade foreman to engage with the entire team and fosters an environment where they feel safe to share innovations.
- **Mitigates schedule risk** by having all team members informed of upcoming tasks and producing commitments from each team member

Quality & Throughput

Deep Dive : Engagement



Psychological Safety for All

Typical Traditional User Meeting Setup



Department Rep
in “Hot Seat”

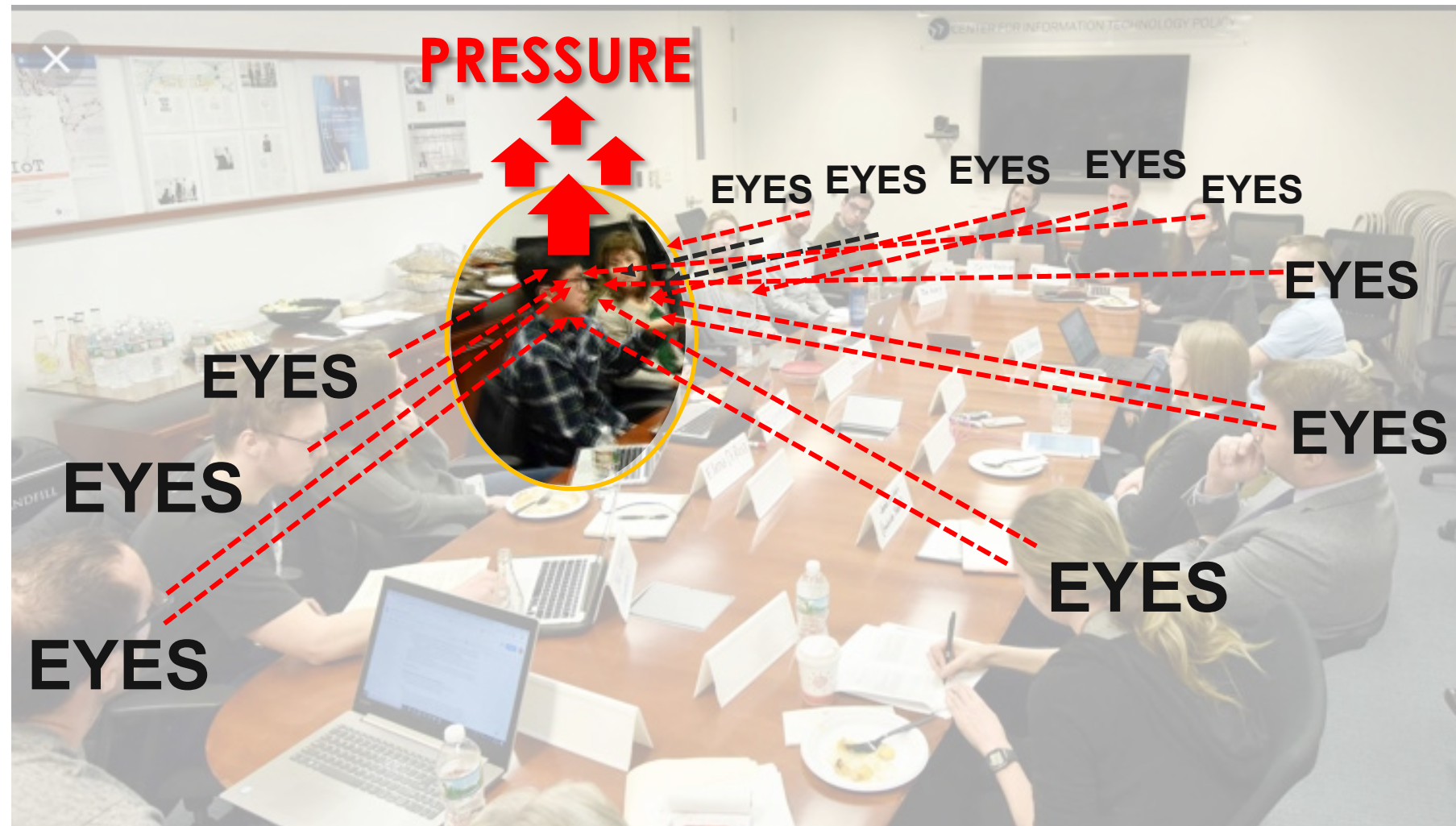
16 Design/
Construction Team
Members

Example photo

Psychological Safety for All

Typical Traditional User Meeting Setup

- ↓ Effectiveness
- ↓ Clarity
- ↑ Fear
- ↑ Confusion



Conversations, Easy!

Promote a relaxed, focused environment, one-on-one “conversations” not “presentations”



A little too relaxed...



This is better.

New Format for Engagement

Room Layout

Goals:

Throughput

Quality

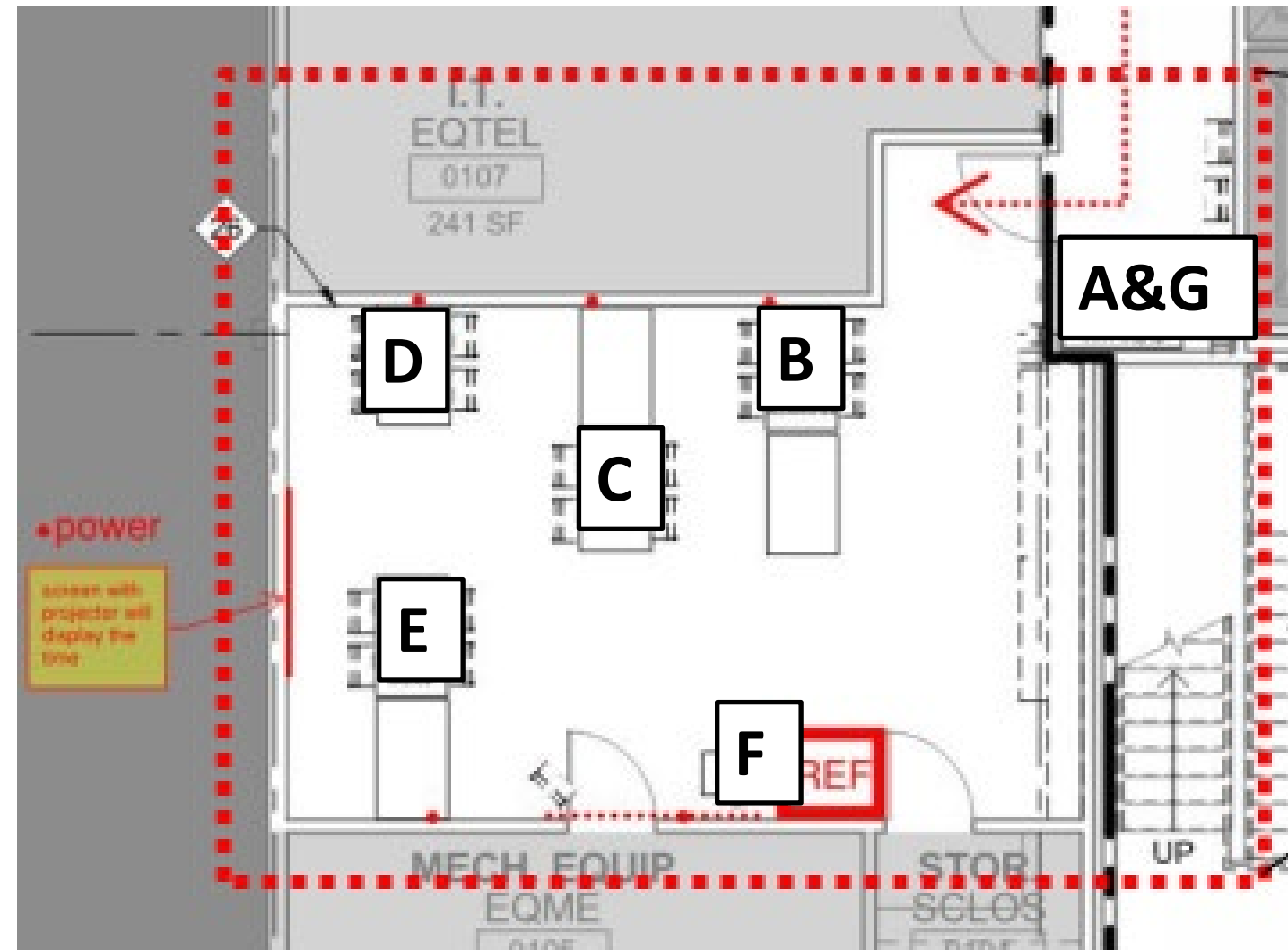
Accurate, lasting decisions

- 7 stations
- 1-2 design staff
- 1-3 department reps

Speed dating style

Physical change,
Time to transition from one
conversation to the next

Team aggregates information at the office



The Setup

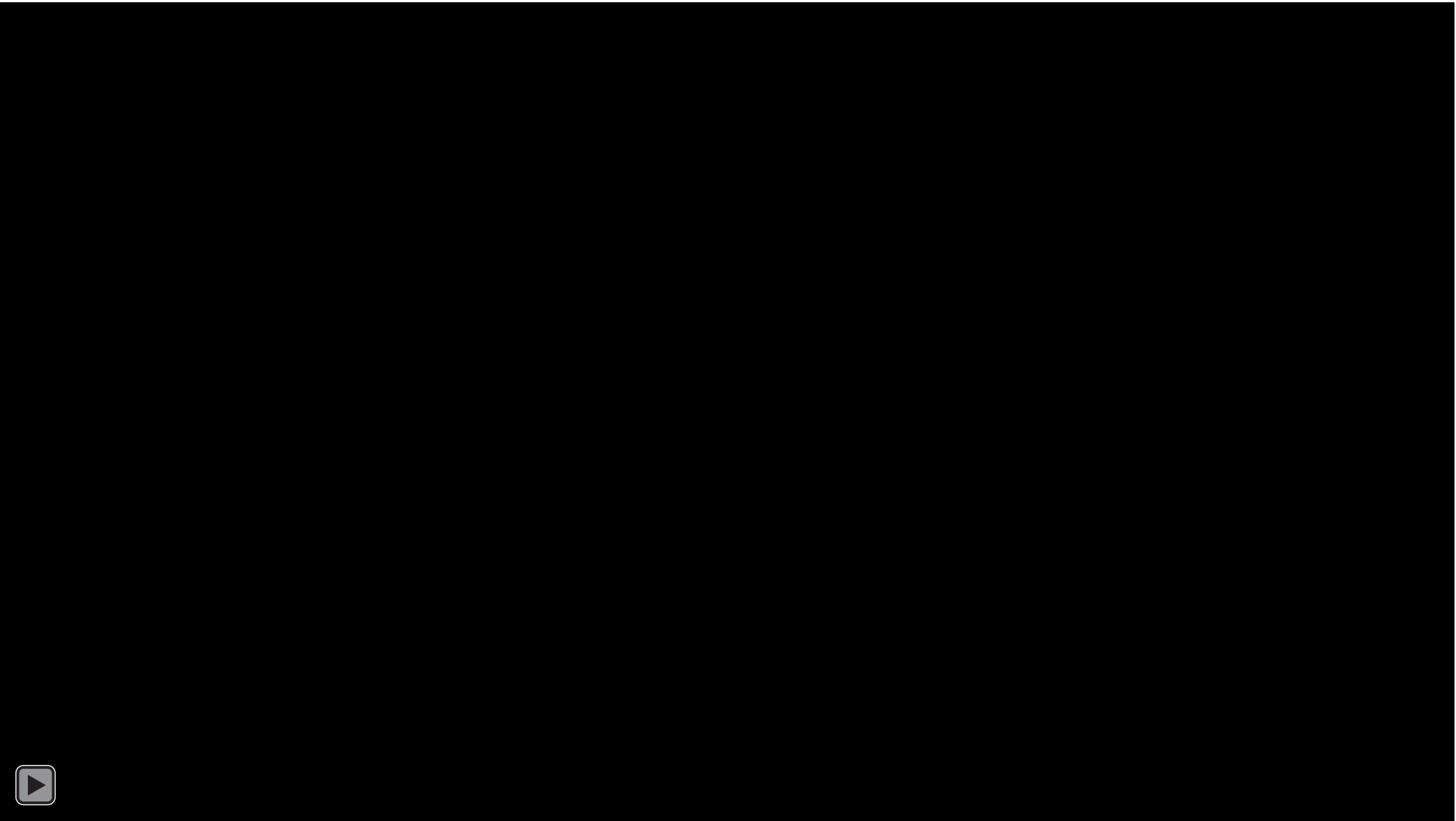
Each Station Set Up:

- 1-2 Design or Construction Team Members
- 2-3 Department Representatives
- 1 computer monitor with high-res 360-degree photos of each existing space for reference
- Large scale plans/ elevations (old school)
- Power/wifi locations - important



“Speed Dating” - Time-lapse

Thursday 12/6/2018 EIN LLA	Station A Intro 15 mins	Station B Casework / Accessories	Station C Furniture	Station D Interior Finishes	Station E Artwork Selection
10:30 AM	EVS				
10:45 AM	PAINTRM	EVS			
11:00 AM		(30 mins)	PAINTRM		
11:15 AM	EIN ADM	PAINTRM	EVS		
11:30 AM		EIN ADM	(45 mins)		
11:45 AM		(30 mins)			
12:00 PM	Security		EIN ADM		
12:15 PM		Security	(45 mins)		
12:30 PM		(30 mins)		EVS	
12:45 PM	CASHRM		Security	(30 mins)	
1:00 PM	Financial	CASHRM	(45 mins)	EIN ADM	
1:15 PM	PT/OT	(30 mins)		(30 mins)	
1:30 PM		Financial	CASHRM	Security	PT/OT
1:45 PM		(30 mins)	(45 mins)	(30 mins)	(30 mins)



Overall **65% REDUCTION** in Design Team and Owner Involvement in User Meetings

Feedback

Great feedback from All! Shortened Schedule! Less Re-work! Major Time Saver!

"I definitely preferred the round robin format followed by a tour of the department to be refreshed. Doing it in this order was especially helpful. I think touring the department with Refresh team was the most beneficial and efficient way of getting everyone on the same page. Much better than meeting in the trailer.

Each station was great with color images that made it easy to visualize the rooms. Everyone was knowledgeable and friendly.

I felt the newer format went much more smoothly."

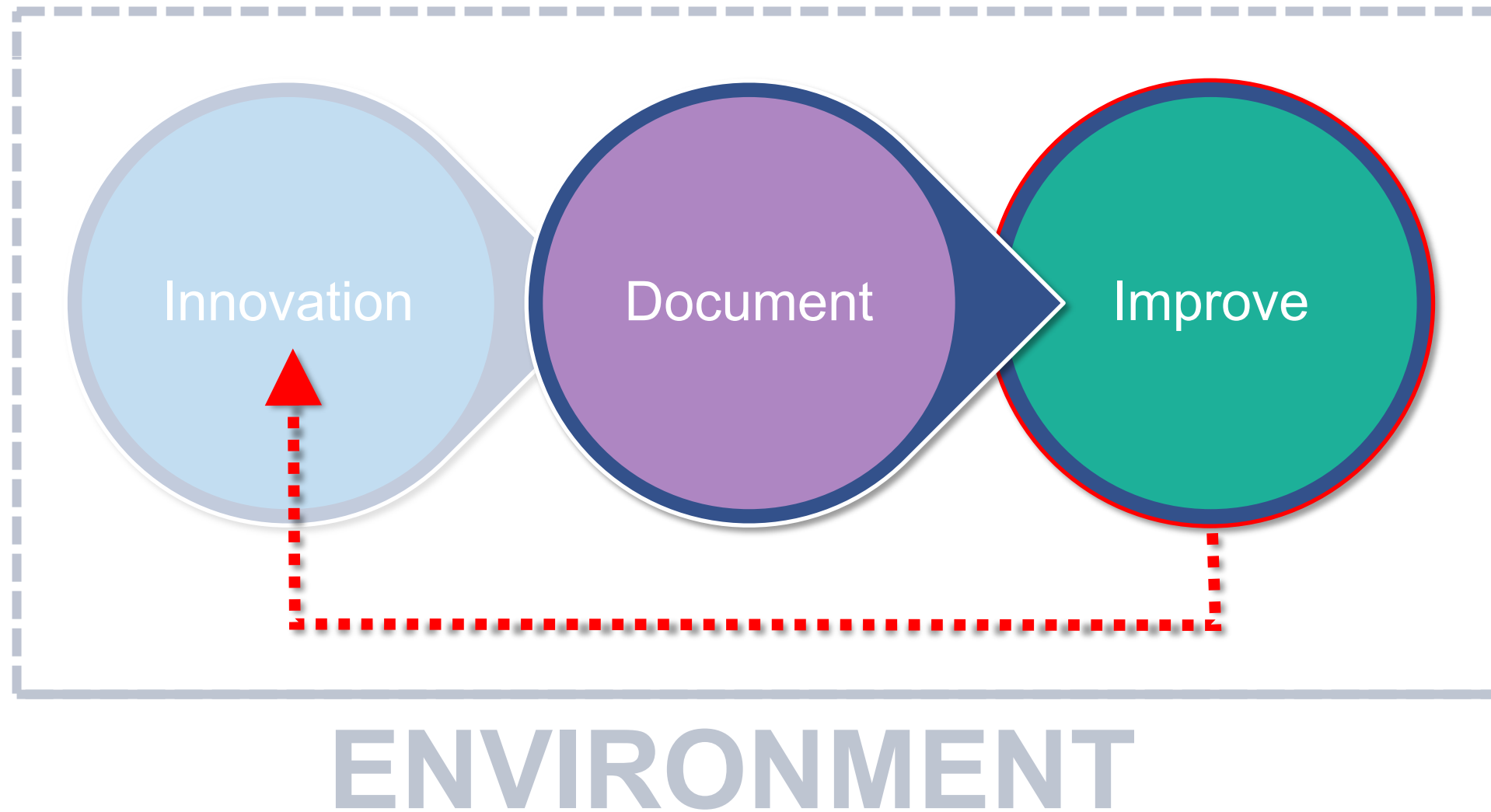
*- Dr. Vandana Khurma, Chief of Rheumatology
Kaiser Permanente*



Continuous Improvement



Document & Improve



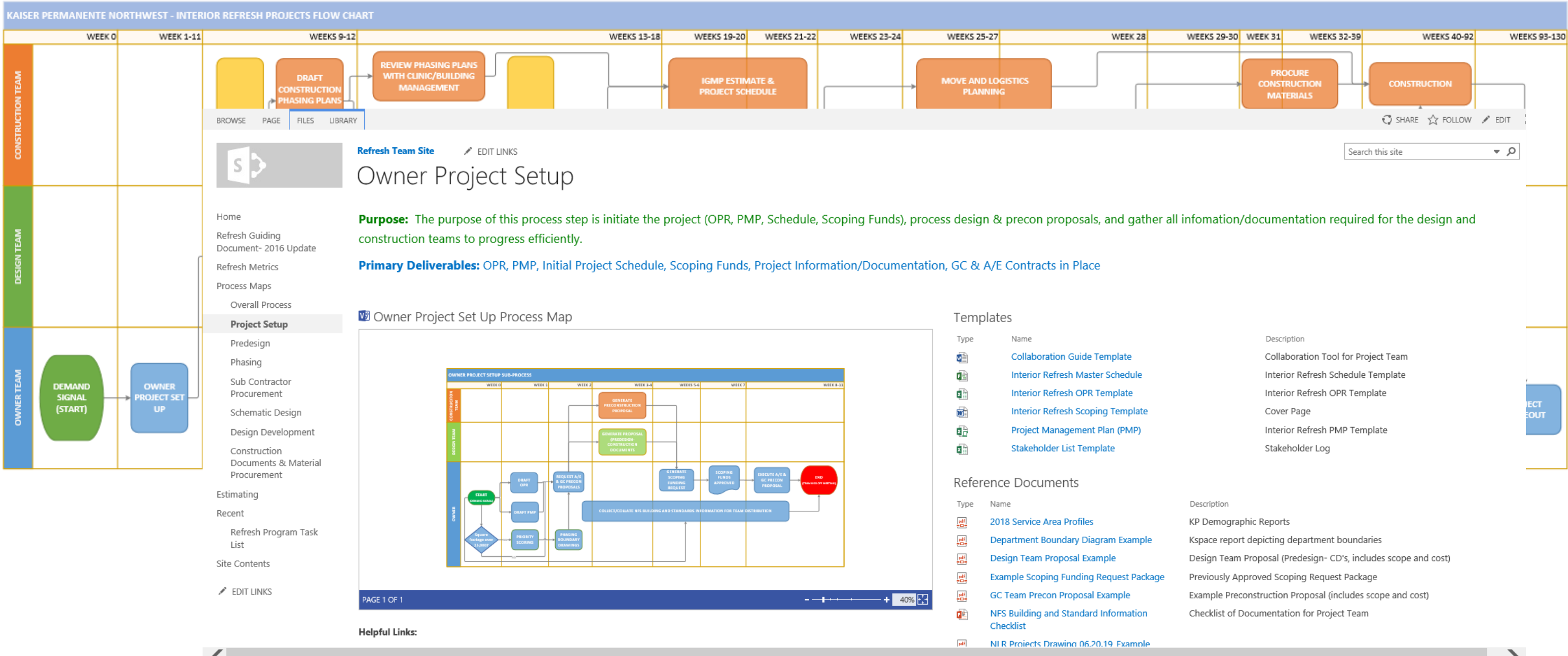
Plus/Delta

“Process was not documented, agreed upon, collectively understood”

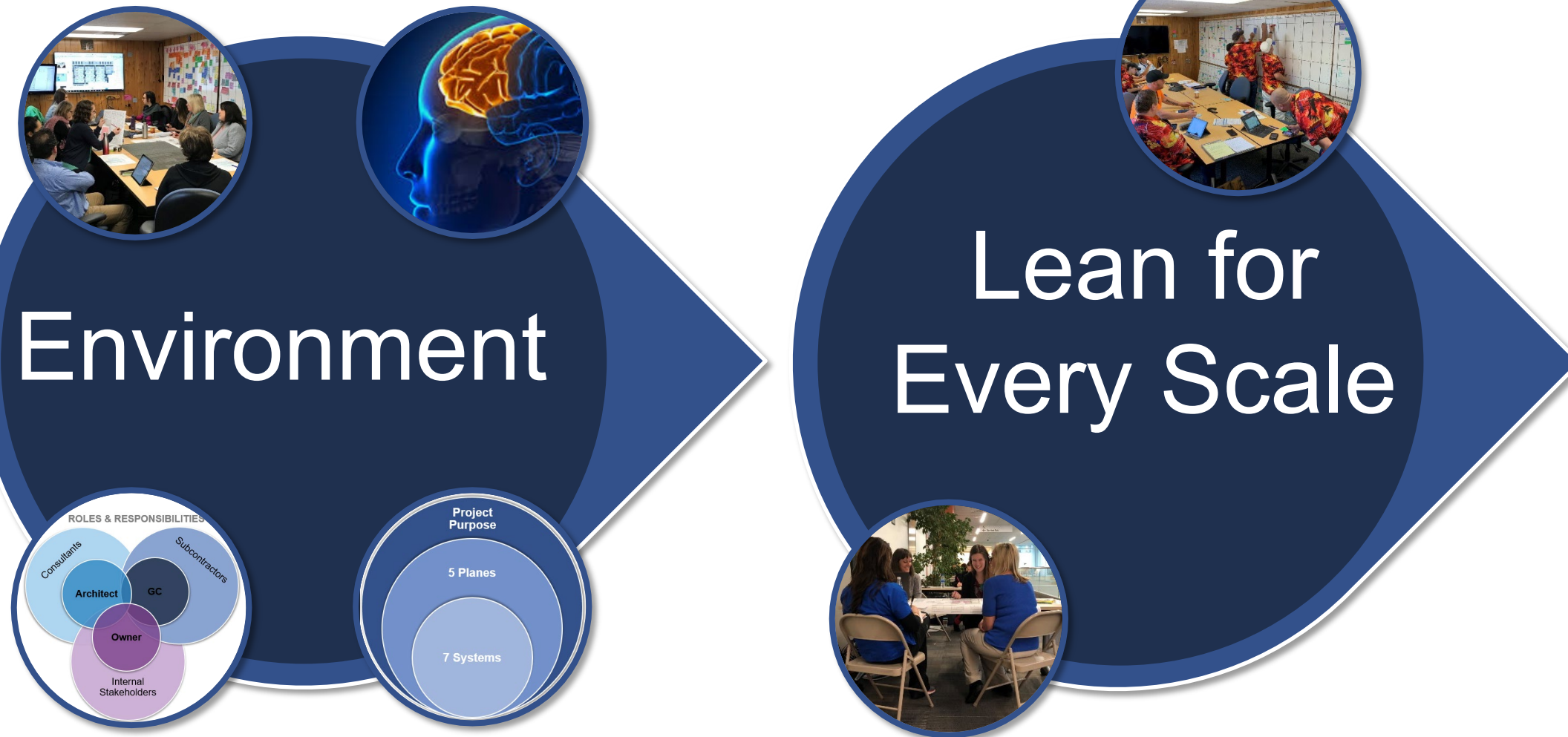


5 Waste List	
Item	Description
1	Magnetic locks in Peds Therapy
2	Flooring lead times and changes
3	TMD Faucets and sinks
4	Furniture
5	Computer arms
6	Equipment <ul style="list-style-type: none"> • Paper towel dispensers • Glove dispensers • Sharps containers • Trash cans • Hampers
7	Outlets
8	Paint color changes
9	State reviews
10	Casework changes
11	Furniture layout changes
12	Computer carts
13	Late procurement items causing multiple mobilizations of existing items
14	Flooring changes
15	Signage revisions
16	Window shade function (closing from bottom up, and opacity being dependent on which bldg. elevation window is on)
17	Pamphlet holders

Process Map



How can you apply this tomorrow?



Great Results!

32% ↓ Cost/SF

52% ↓ Schedule Duration

71% ↓ RFI's

29% ↓ ASI's

81% ↓ CO's

Contact Us

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In the spirit of continuous improvement, we would like to remind you to complete this session's survey in the Congress app! We look forward to receiving your feedback. Highest rated presenters will be recognized.



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Thank you for attending this presentation. Enjoy the rest of the 22nd Annual LCI Congress!