



2025 LEAN IN DESIGN FORUM  
APRIL 30–MAY 1, 2025

#LCIDesign25

LEAN DESIGN: UNLOCKING  
NEW POSSIBILITIES

**VDC for Lean Design:  
Unlocking Projects'  
Efficiency**



**P2SL**

Diana Gasca, Design Manager - Hermosillo  
Pablo Buensuceso, VDC Manager - Hermosillo

May 1st, 2025



# Speaker's Introduction



**Diana Gasca**

*Precon Design Manager*



**Pablo Buensuceso**

*VDC Manager*



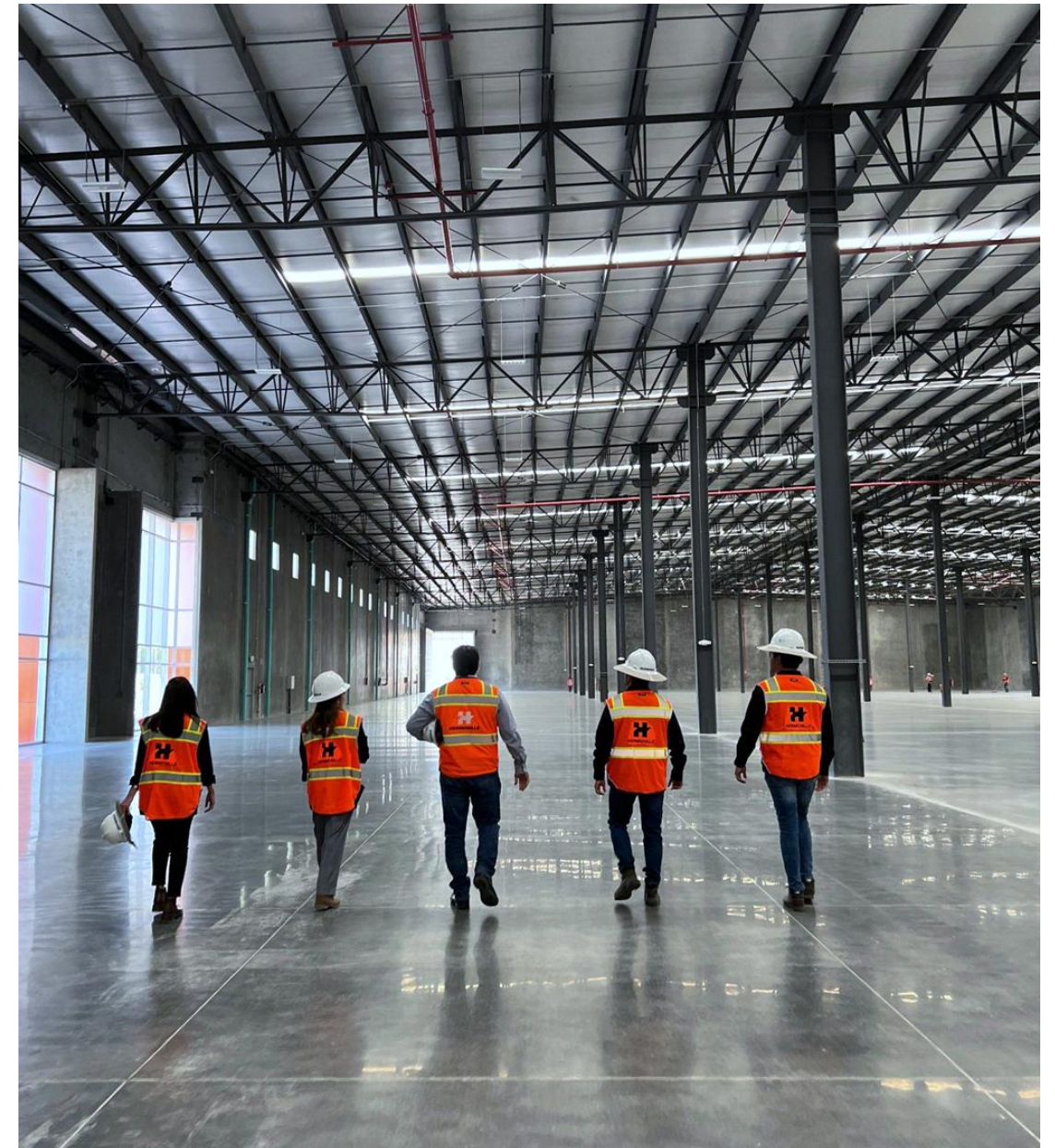


# Hermosillo





- **Project Life Cycle approach:** Industry Standards
- **Industrial Warehouses Life Cycle Project:** Challenges & Adjustments
- **VDC Tools:** What, How and When
- **Lean & Scrum:** Making it Real
- **Results in numbers:** Time, Money & Society
- Questions & Answers

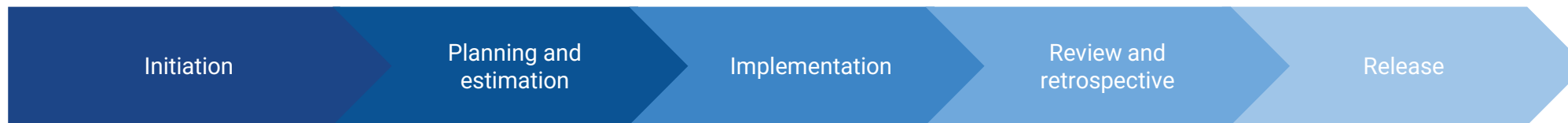


# Project Life Cycle approaches

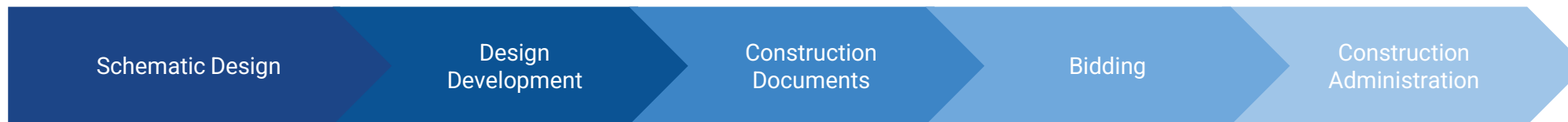
## Lean Construction



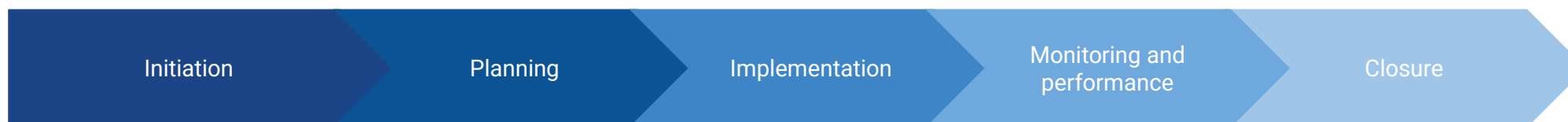
## Scrum Frame



## AIA - Design Process



## AIA - Construction Project



## AGC - Project Life Cycle



Deliver on  
time, within  
budget and  
with high  
quality

# Project Life Cycle approaches aligned to our workflow

## RECONSTRUCTION

## BID

## EXECUTION

### Lean Frame



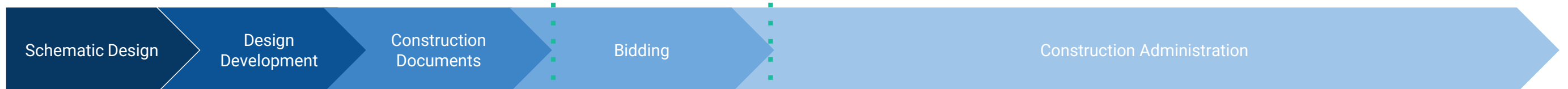
### Scrum Frame



### AGC - Project Life Cycle



### AIA - Design Process





# Identifying the Lean & Scrum tools that optimized the project's life cycle

## LEARNED LESSONS

6 WLA

5S

Sprint Planning

GEMBA WALKS

Retrospective

CoS

RISK MANAGEMENT

A3 THINKING

WWP

Lean Construction

Initiation

Planning

Execution

Monitoring

Closing

Scrum Frame

Initiation

Planning and  
estimation

Implementation

Review and  
retrospective

Release

MASTER PLAN:  
PULL PLANNING

VALUE  
MANAGEMENT  
WORKSHOP

PROCUREMENT  
PROGRAM AND  
LONG LEAD ITEMS

ON-BOARDING

DAILY HUDDLE

BIG ROOM

# Industry's main challenges

The industry is evolving:

- Clients now expect faster project delivery at lower costs

+

- There's a growing demand for industrial warehouses driven by  
nearshoring trends

=

- It was time to reimagine our design workflow, we wanted to design &  
build smarter, not just faster.



# Industrial Warehouses: main challenges

- The Pressure Is Real — and Growing
  - 🕒 Tight Timelines
  - Bidding: deliver in just 2–4 weeks
  - Fast-track design: 8–12 weeks, running parallel to construction
- Client Challenges
  - Inexperience and constant indecision slow momentum
- Internal Growth
  - Rapid scaling = new hires, new teams, constant onboarding - 👥 Empower new, inexperienced talent & enable fresh teams to perform like seasoned pros
- External Demands
  - Nearshoring is driving a surge in project demand
- All happening at once.
- We needed a system built for speed, clarity, and resilience.

We Weren't Just Looking for a Process —  
We Needed a Breakthrough

Because this isn't about doing things the  
old way faster — It's about redefining  
how we build from the ground up.

# Molding our Workflow

## PRECONSTRUCTION

STRATEGY

DEVELOPMENT

## BID

REVISION

## EXECUTION

PROJECT  
TRANSMIT  
TAL

MONITORING

## DESIGN

PROJECT  
RECEPTION

DESIGN  
DEVELOPMENT

MONITORING

## CONSTRUCTION

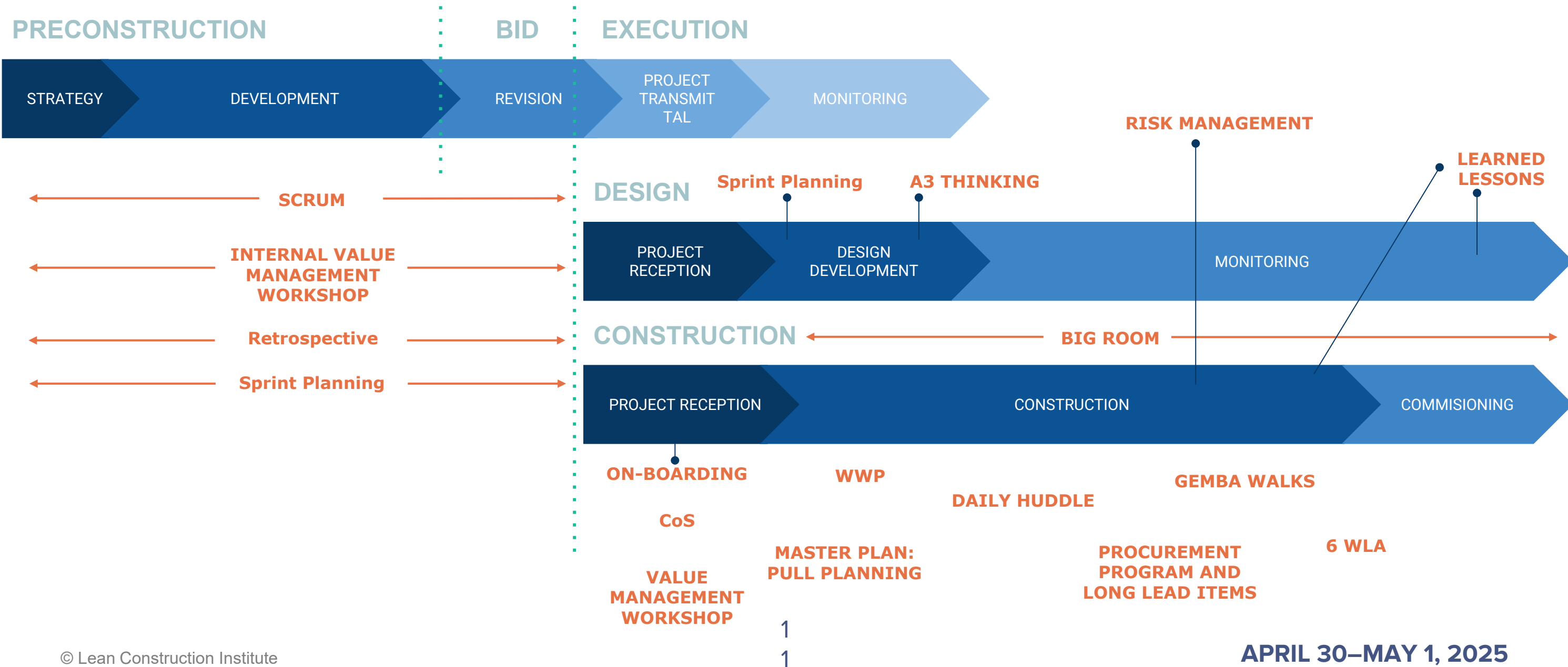
PROJECT  
RECEPTION

CONSTRUCTION

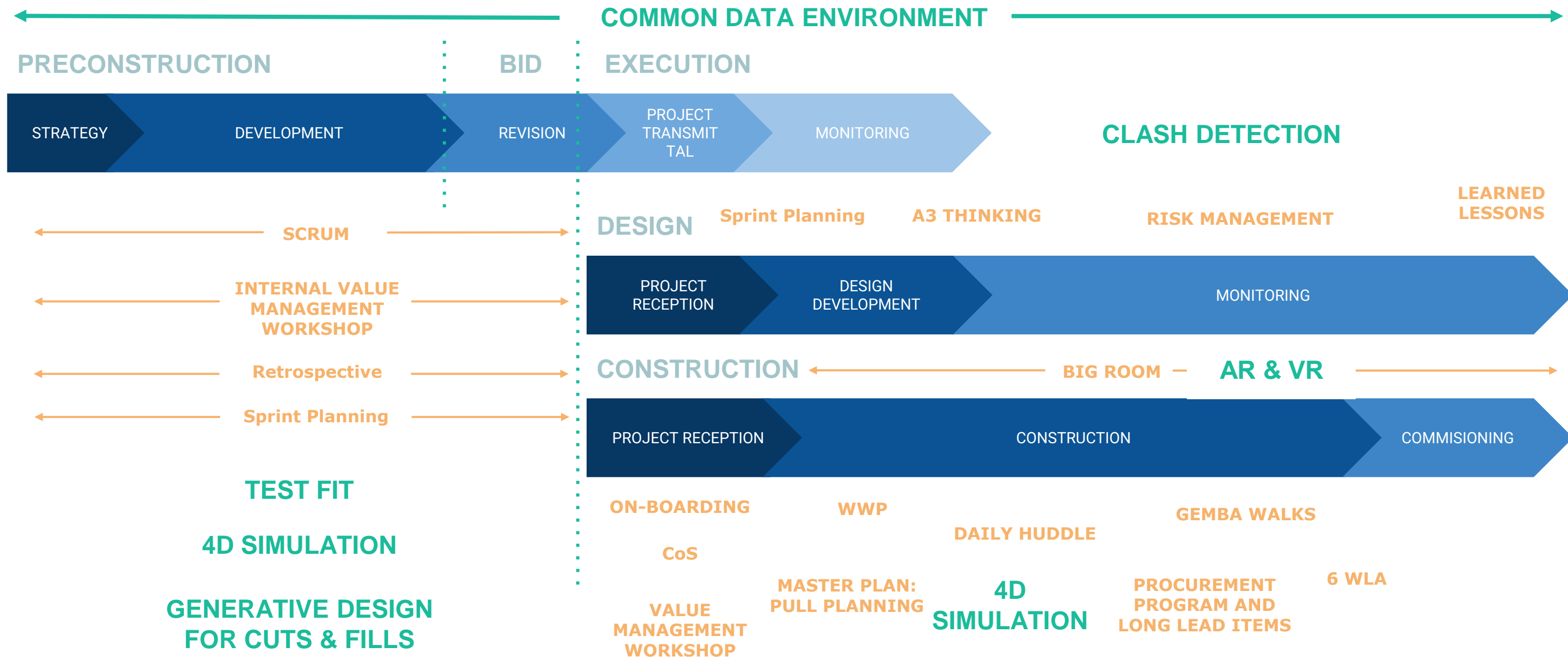
COMMISIONING



# Molding our Workflow + Lean & Scrum



# Molding our Workflow + Lean & Scrum





# Common Data Environment: CDE (ACC)



# Pre Construction: Test Fit

## FEASIBILITY OPTIONS



## GENERATIVE DESIGN & OPTIMIZATION



### PREDESIGN

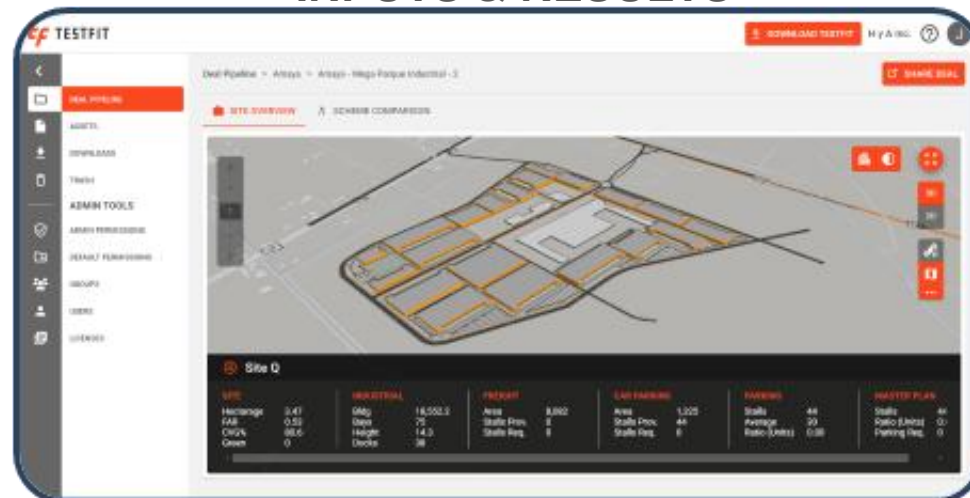
### DESIGN OPTIONS



### PLANNING

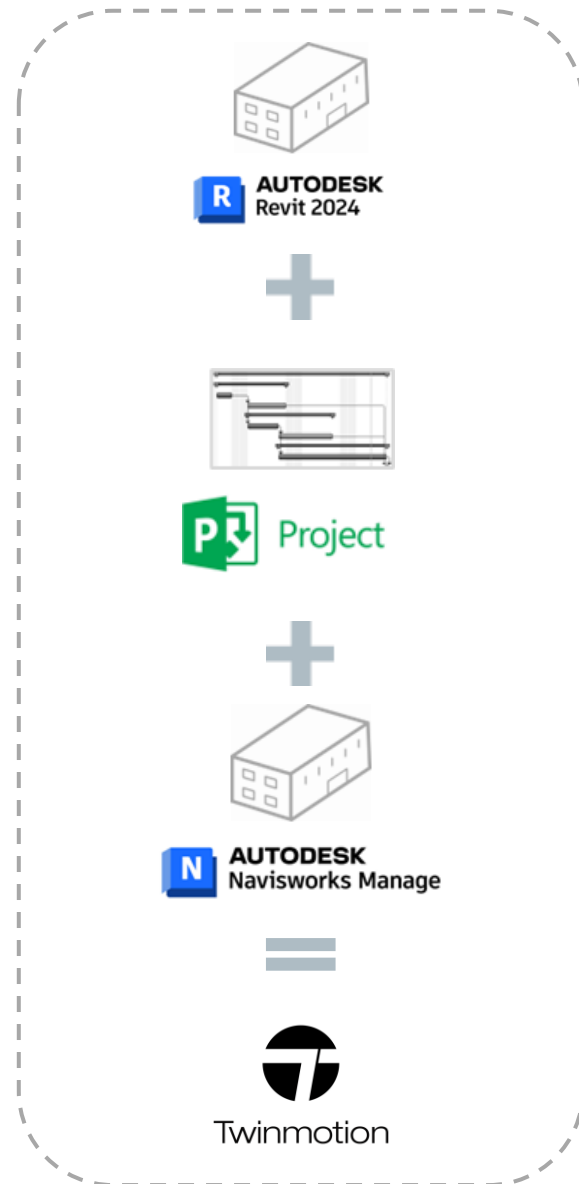
AI

## INPUTS & RESULTS





# Pre Construction & Construction: 4D Simulation



3D MODEL  
+  
TIME



CONSTRUCTION  
SEQUENCE



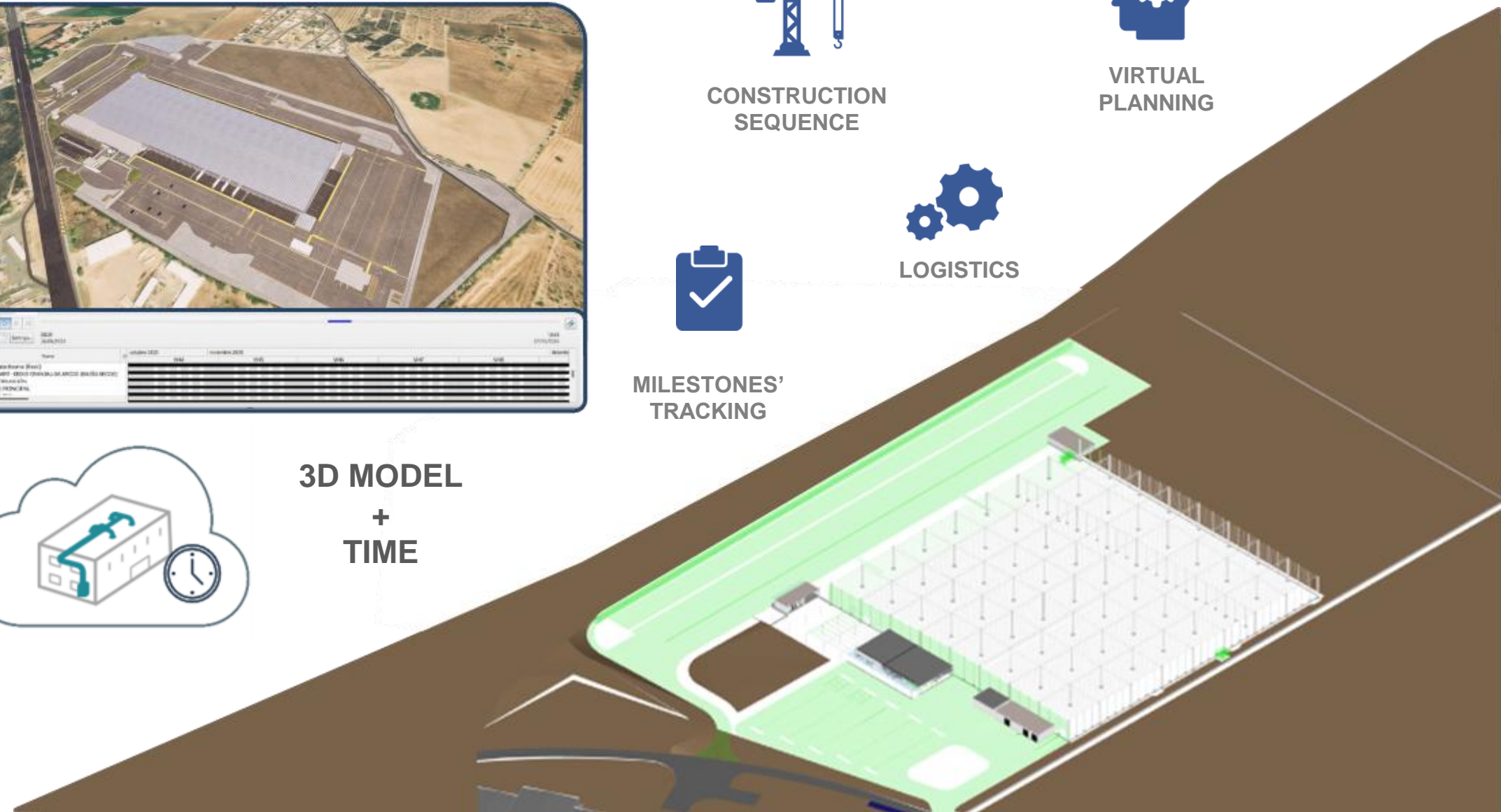
VIRTUAL  
PLANNING



LOGISTICS



MEILESTONES'  
TRACKING



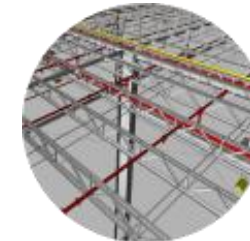
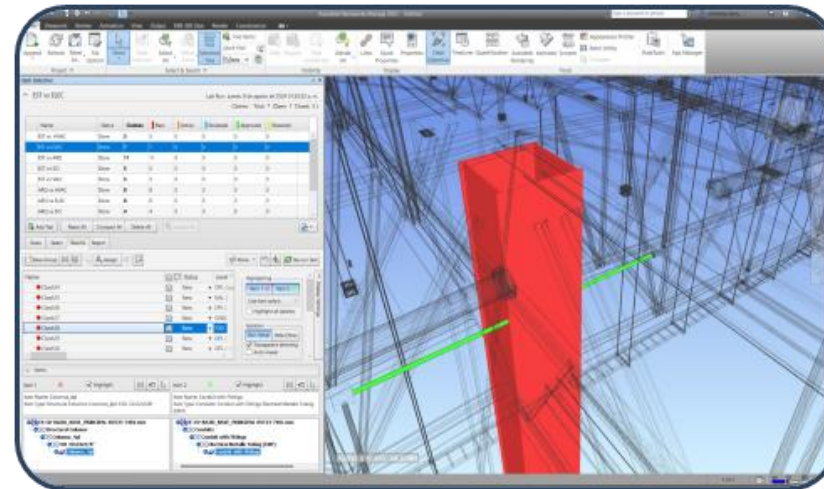
# Construction: Clash Detection



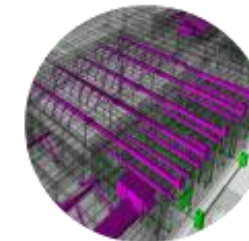
**AUTODESK**  
Navisworks Manage



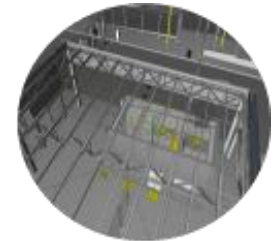
**AUTODESK**  
Construction Cloud



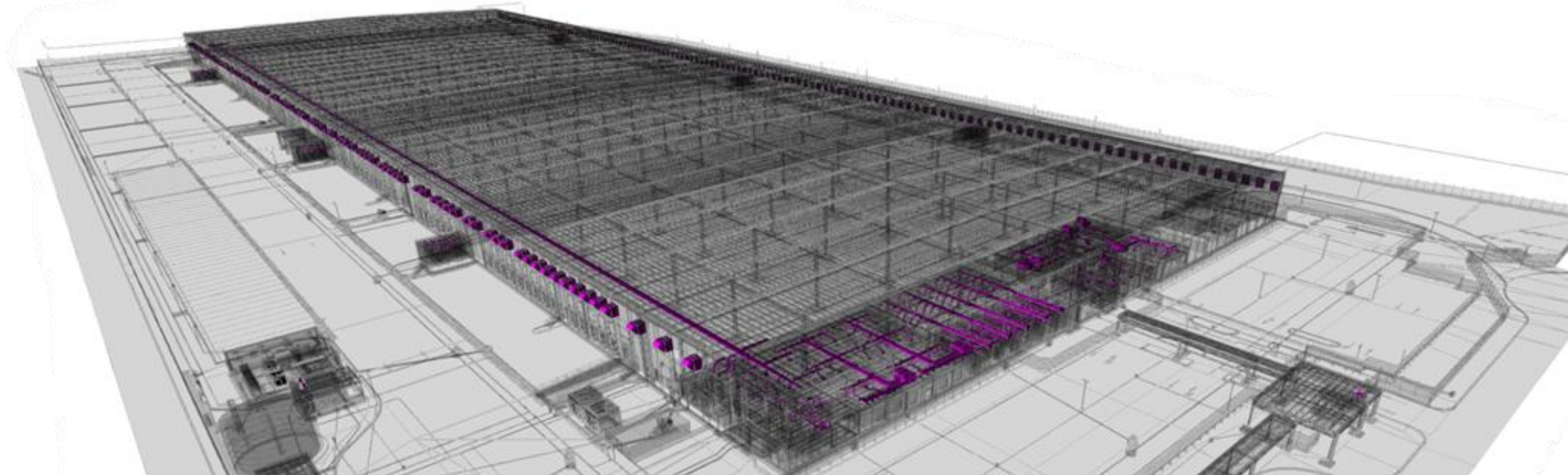
CONSTRUCTABILITY  
PREVIEWS



INTERFERENCE  
CHECK



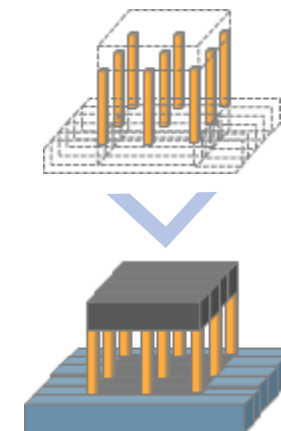
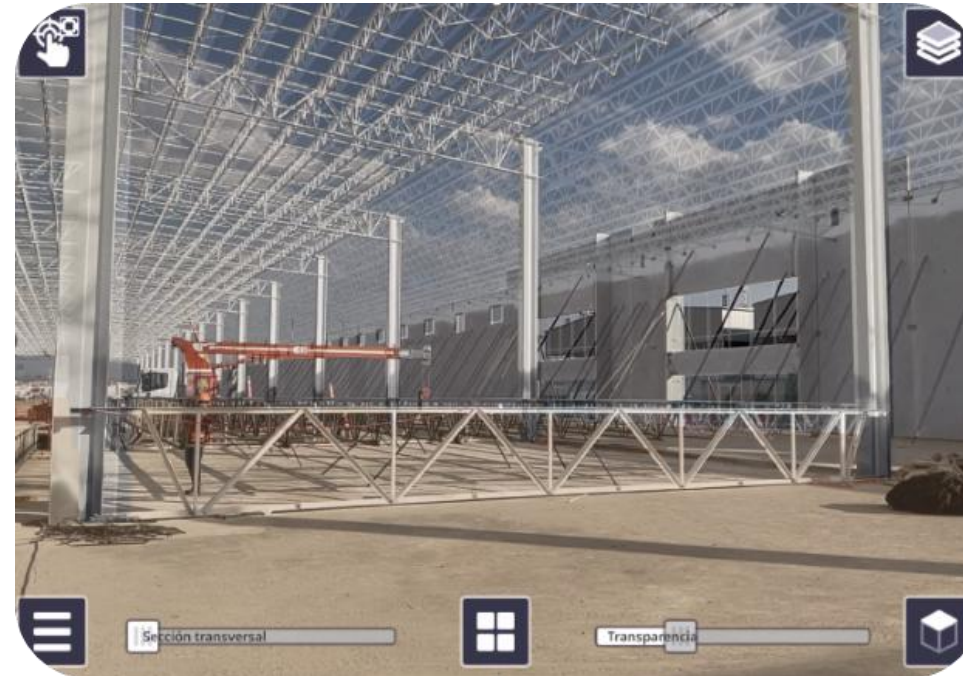
MULTIDISCIPLINARY  
MANAGEMENT



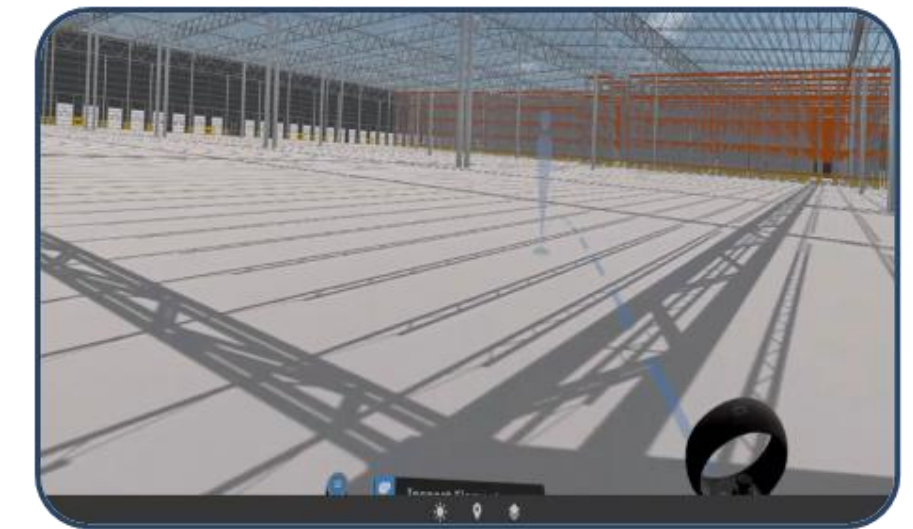


# Pre Construction & Construction: AR & VR

## ON-SITE VALIDATION



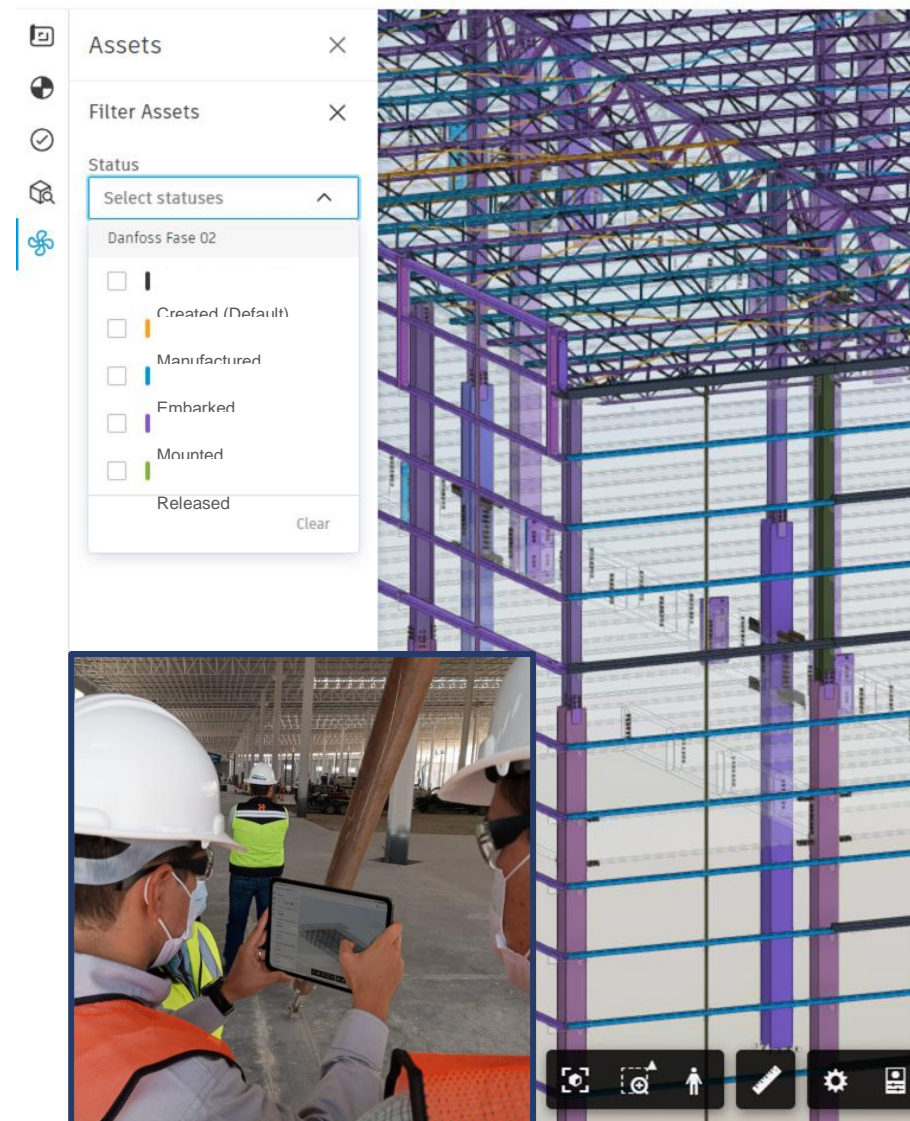
## VIRTUAL IMMERSION





# Construction: Asset Management

## 3D MODEL PROGRESS

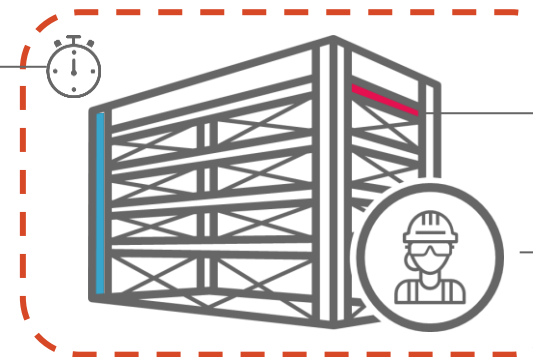


## ASSETS TRACKING

REAL TIME  
INFORMATION



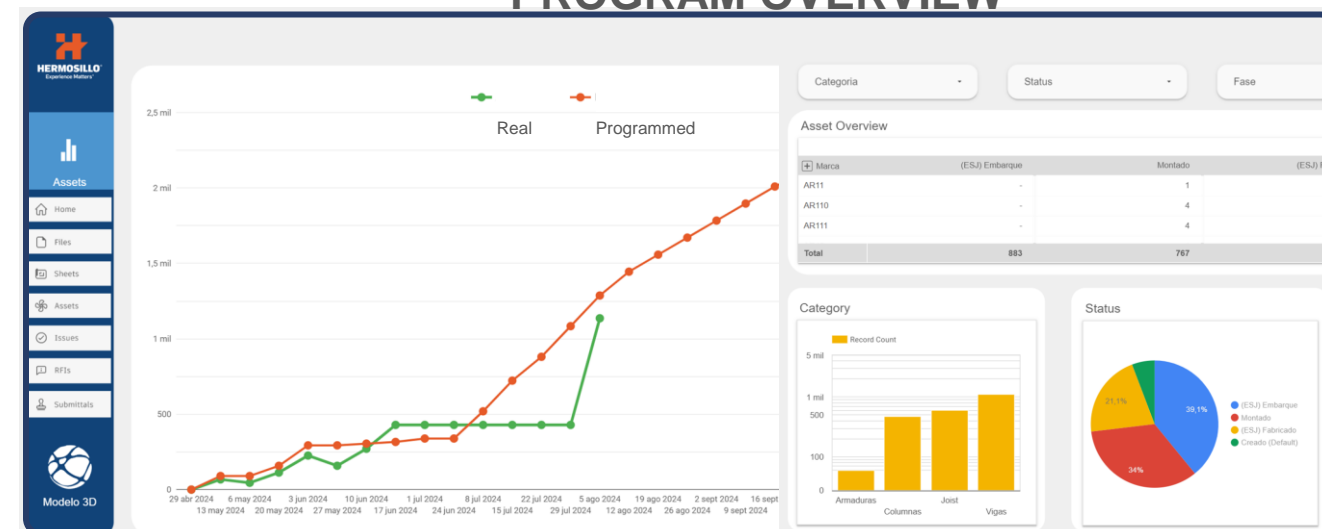
QR  
SCANNING



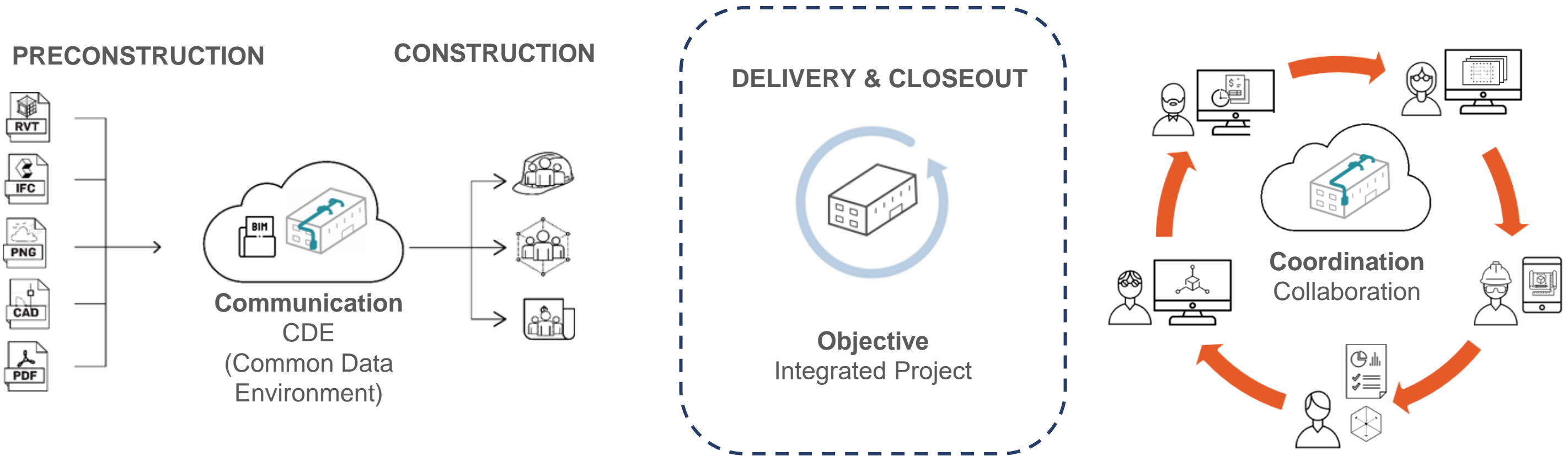
STATUS

METAL  
STRUCTURE

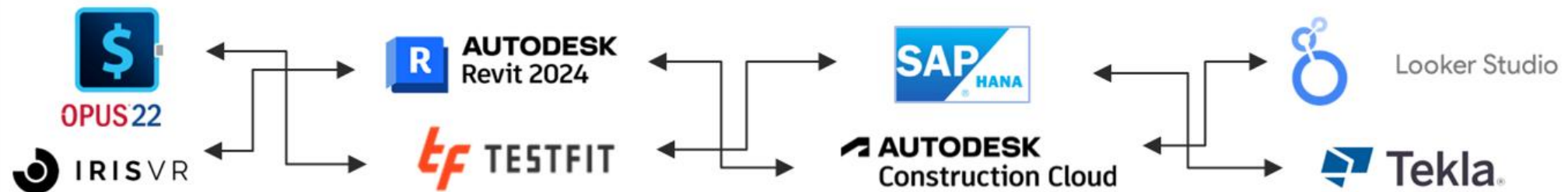
## PROGRAM OVERVIEW



# VDC Tools: WHAT, HOW AND WHEN



## Technology Integrated Ecosystems





# Making it real: leveraging lean tools to succeed

## LEAN METHODOLOGY

- Common Data environment
- Test Fit
- 4D Simulations
- Clash detection
- AR & VR
- Asset management

## SCRUM FRAME



# Questions & Answers







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Unlocking Projects'  
Efficiency



Lean  
Construction  
Institute  
Transforming Design and Construction

P2SL



# Icon Library

- These icons can be used throughout your presentation



Plan | Value  
Generation



Do



Check



Act | Safety



Continuous  
Improvement



Respect for  
people | Team



Removal of  
Waste



Process  
and Flow



Optimize the  
Whole



Built  
Environment



Tools



Resources



Training



Research



Collaboration

