

PerspECCtive

Theme:

**Be Ready to Lead and improve outcomes**

# Predictable Engineering in an Un-predictable World

Learning from our past to create a new future where we deliver predictable outcomes, with “value & trust” as the foundation of the relationship.

Year:

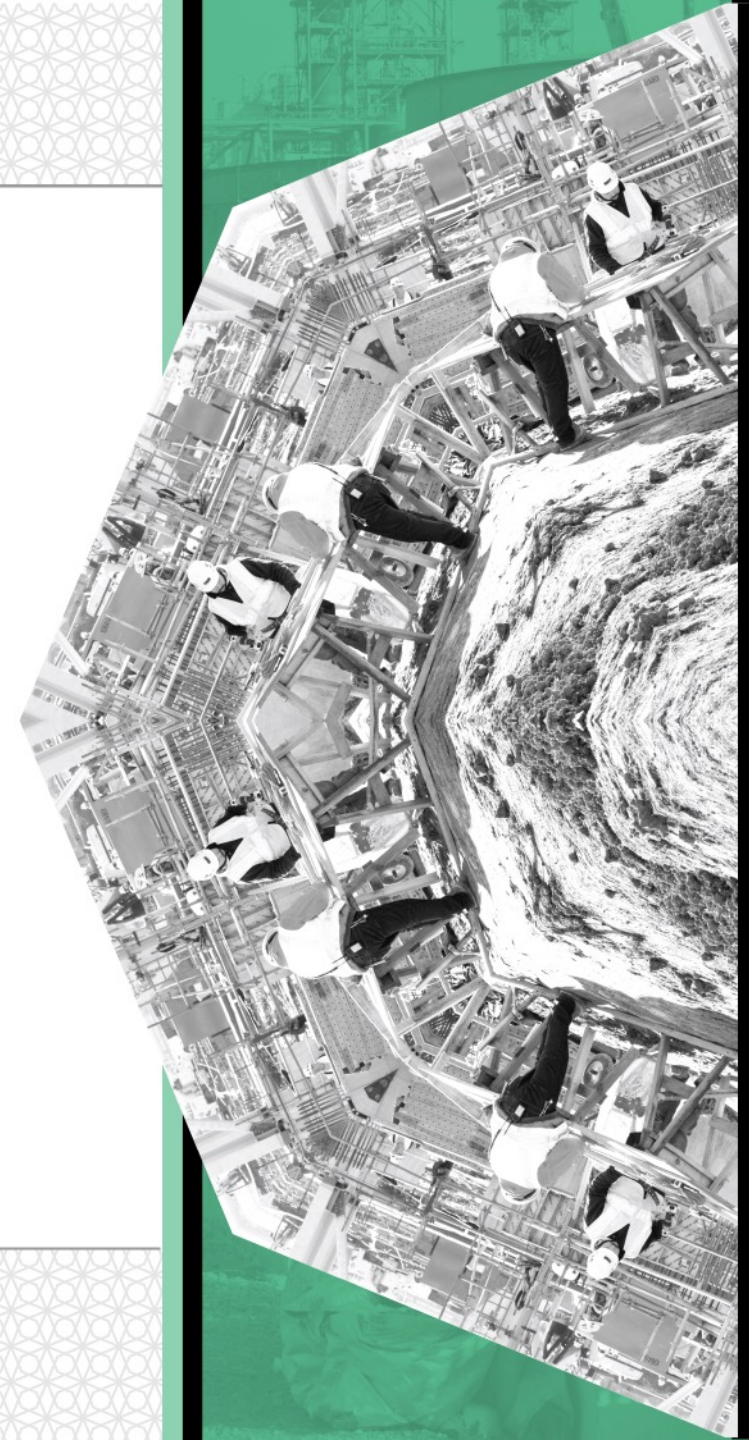
**2023**

Date:

**August  
31<sup>st</sup>**

Location:

**Marco Island, Florida - Marriott**



# Predictable Engineering in an Un-predictable World

## Facilitator



**Paul Hargreaves**

Manager  
**Chevron**

## Industry Leaders



**Brian Ferrier**

General Manager  
**Chevron**



**Mark Trueman**

Group President  
**Worley**



**Bo Stanley**

Senior Vice President  
**Wood**

# Session Logistics

- ECC Slide here about the session Logistics, how to ask questions, etc.

# Agenda

- Opening Remarks
- Improving Industry & Predictable Project Outcomes
- Case for Change: Learning from the past to create the new future
- The journey and successes
  - Alignment of the drivers
  - The foundation of the “how” of the new future
- Key Take-aways
- Closing Remarks

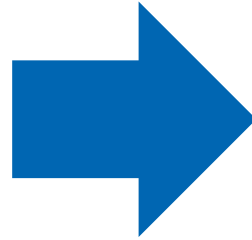
# The challenges we face and the opportunities in front of us?



History has driven  
transactional  
delivery &  
commoditized  
engineering



Engineering is  
not just  
engineering



Re-wire our  
contract &  
relationships



Re-thinking  
design



Re-skilling the  
workforce



Deploy  
technology &  
innovation

# Learning from the past to create a new future to deliver competitive and predictable outcomes



## Organizational Capability

Gaps in both the Owner's & Contractors organization

Industry needs are out-stripping supply for talent



## Design basis & lockdown

Design lockdown was not clearly defined and understood by all

HAZOP & MOC was not consistent



## Out of Sequence progression

Progression of FEED and detailed design deliverables out of sequence with the work plan



## Constructability Management

Inconsistent engagement with other functions to build constructability and safe execution into the design.



## Quality of Deliverables

Incomplete or sub-standard deliverables

Documentation was inconsistent across owner and business partners



## Management of Digital & Data

Poor management of vendor data

3D model readiness to support project needs

Asset Data & systemization inconsistent applied

# Success is driven by everyone aligning on the drivers & their intent



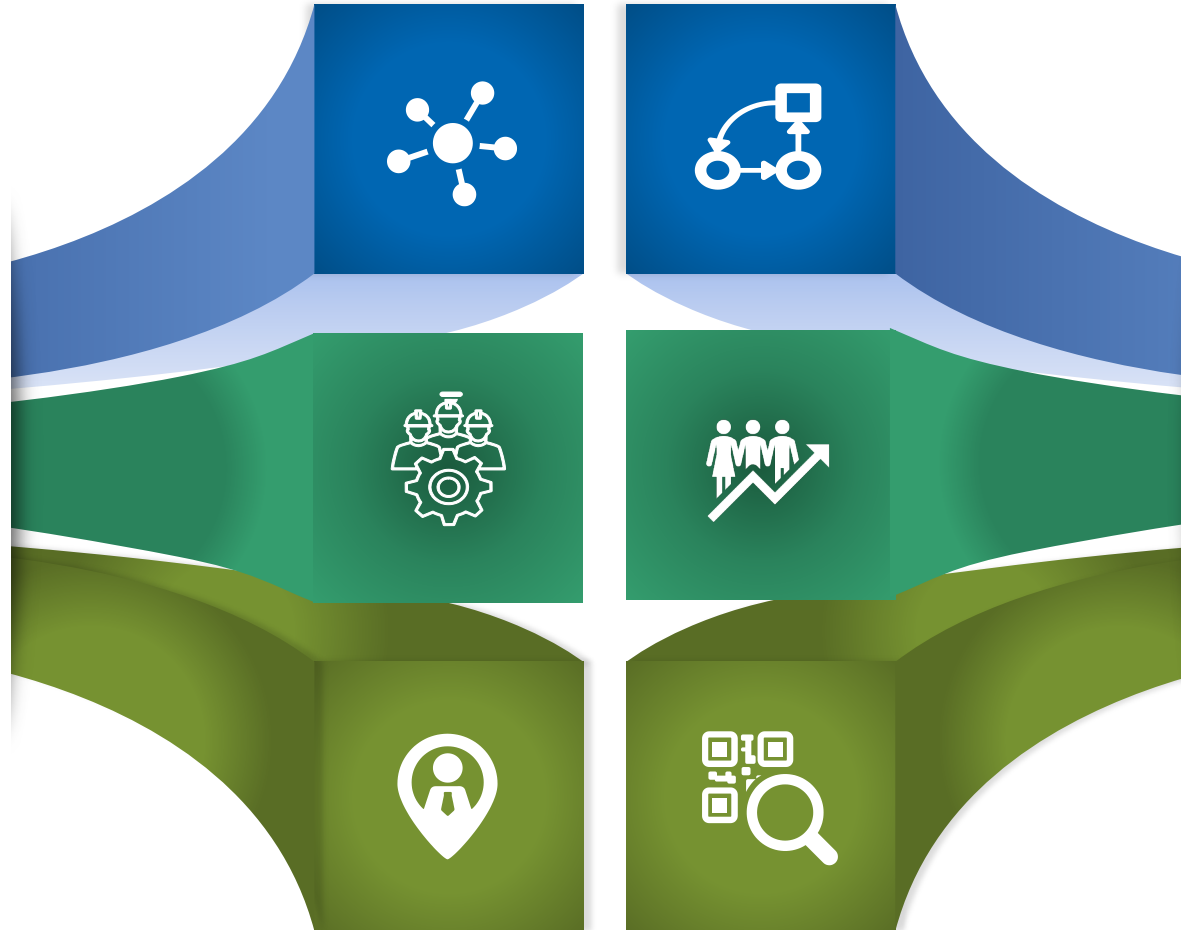


# The foundation of the “how” for the new future

**Strategic shift** to focus on **partnership first**, ease of doing business

Building Relationships,  
**Trust** & Working as **One team**

Creating an environment of **challenge, co-development and ingenuity**



Flexibility and Adaptability—  
**think Global, act Local**

**Innovation** - openness to try new approaches/tools

**Transparency** for planning & open learning culture



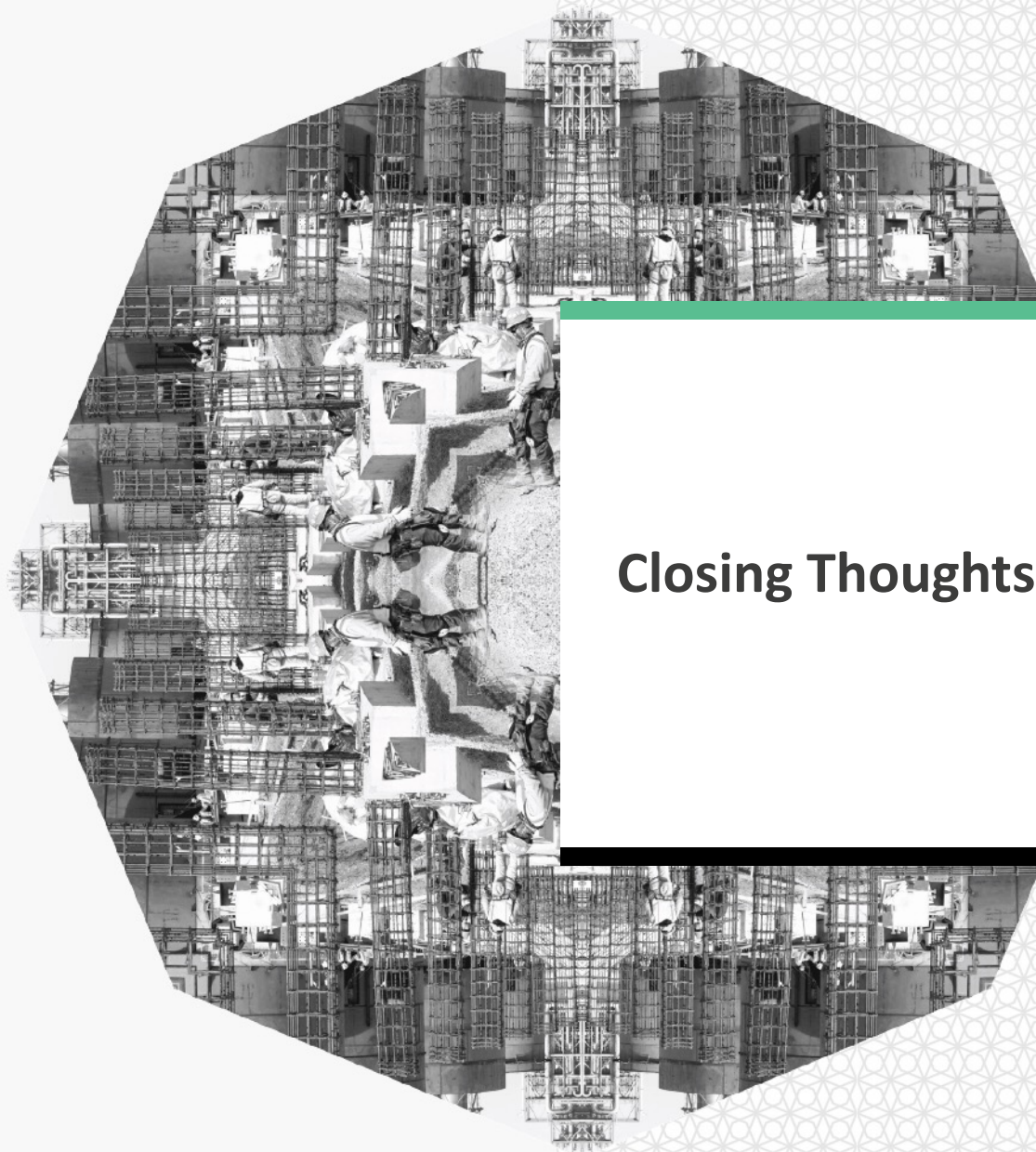
# Key Takeaways

- Engineering needs to change from Commodity based to Value driven. Where are you today? What lens are you looking at your business?
- “Trusted partnerships” are foundational and when paired with a long-term outlook drive sustainable & repeatable performance improving outcomes.
- Focus on building & enabling the right relationships and collectively owning the “how” through:
  - Transparency of expectations & workload outlook
  - Creating the right environment for challenge, learning, innovation and continuous improvement
  - Developing people, new ways of working and digital solutions
- The contract needs to be flexible, enable the “how”, reward strong performance and improve profitability & predictable outcomes for all



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## Closing Thoughts





**Thank You!**