

22<sup>ND</sup> ANNUAL



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OCTOBER 19-23

# Michigan Owner Approaches to IFOA Contracting

Panel –Leisa Williams-Swedberg (Michigan State University), Michael Mayra (General Motors)  
Moderator – Victor Sanvido (Southland Industries)

October 22, 2020

# Michigan Owner Approaches to IFOA Contracting



***Leisa Williams-Swedberg***  
Performance Manager,  
Michigan State University



***Moderator***  
***Victor Sanvido***  
Senior VP,  
Southland Industries



***Michael Mayra***  
Construction Group Manager,  
General Motors



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# Two IPD stories

Leisa Williams-Swedberg, Michigan State University (MSU)

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



# The idea



IPD - Seeking innovation with a value proposition



# Shaw Hall Dining Center

Project and schedule

Contract

Team and trade partners

Progress

Collaboration

Completion



# Shaw Hall Dining Center Project and the schedule

- 1<sup>st</sup> IPD project
- \$13.95M million project
- Construction start - May 2012
- Substantial completion - December 2012





# Shaw Hall Dining Center Contract

- AIA and home-grown contracts
- Review of Consensus Doc 300
- Seek acceptance



# Shaw Hall Dining Center Team and trade partners

- IPD team training
- New box of tools
- New terminology





# Shaw Hall Dining Center Progress

- Months in and we had:
  - A contract
  - A team
  - IPD training





# Shaw Hall Dining Center Collaboration

- Pre-design with trade partners
- Open book concept
- The Big Room
- Many stakeholders
- Focused meeting and agendas





# Shaw Hall Dining Center Completion



Felt like a \$16M project with a \$14.2M budget

Even with the add of the temp dining for \$250K the project came in under budget



# Shaw Hall Dining Center Completion



- Change orders = \$460K or 3%
- Met the conditions of satisfaction



# The Minskoff Business College Pavilion

Project

Schedule

Contract

Tools

Team and communication

Personal take-aways

Completion



# The Minskoff Business College Pavilion Project



Pre-existing condition



An Iconic transformation

Total project cost \$62M



# The Minskoff Business College Pavilion Schedule



# The Minskoff Business College Pavilion Contract

- Consensus Doc 300
- Standardized knowledge
- One team
- Bring trade partners in earlier





# The Minskoff Business College Pavilion

## Tools

- Terminology
- Training
- Don't let the tools get in the way



# The Minskoff Business College Pavilion Team and communication

- Be prepared to make team changes
- Find the right balance
- Created a bridge
- Sr. Executive team
- Personal take-a- ways



Collaboration



# The Minskoff Business College Pavilion

## Personal take-a-ways

- Lives enriched
- Condition of Satisfaction to be used
- Multi-discipline decision making
- As much as owners allow
- In a heartbeat



# The Minskoff Business College Pavilion Completion



- \$70M project for \$61.2M
- \$800K returned at 60% complete



# The Minskoff Business College Pavilion Completion



- Change orders = \$727.5K or 1.18%
- All conditions of satisfaction were met





# Wrap-up





## The Minskoff Business College Pavilion Would MSU do IPD again?



# How can you apply this tomorrow?

- *Provide lean resources or training for the team that will be working on the project if they have not delivered an IPD project before – “learn the terminology”.*
- *Understand and have consensus on the contract – “once it was executed the document was rarely referenced”.*
- *Identify the stakeholders early and “put the right people in the right seats”, knowing some may need to be removed.*
- *Know the amount of time invested at the beginning of the project will pay off in the end – “go slow to go fast”.*
- *Don’t ignore the value of Target Value Design (TVD) estimating – this keeps the estimator informed of all potential design changes during preconstruction and the change is only approved if the team understands and agrees to the cost impact.*
- *Don’t let the tools get in the way – “know when to stop trying to figure the tools out and get to work”.*



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# General Motors' Approach to IFOA Contracting

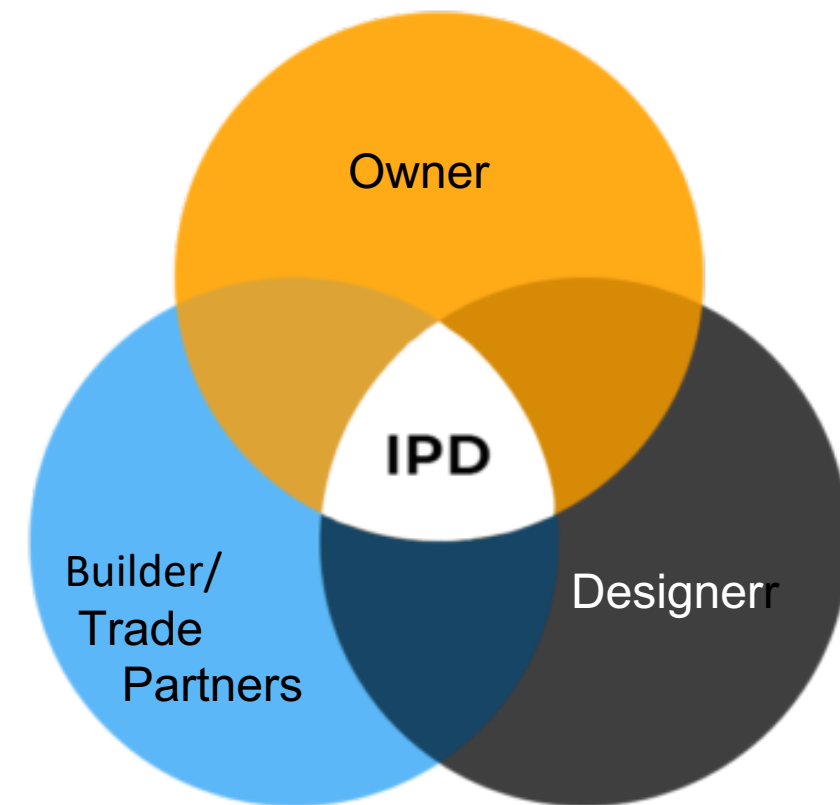
Michael Mayra, General Motors Company

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

# Problem Statement

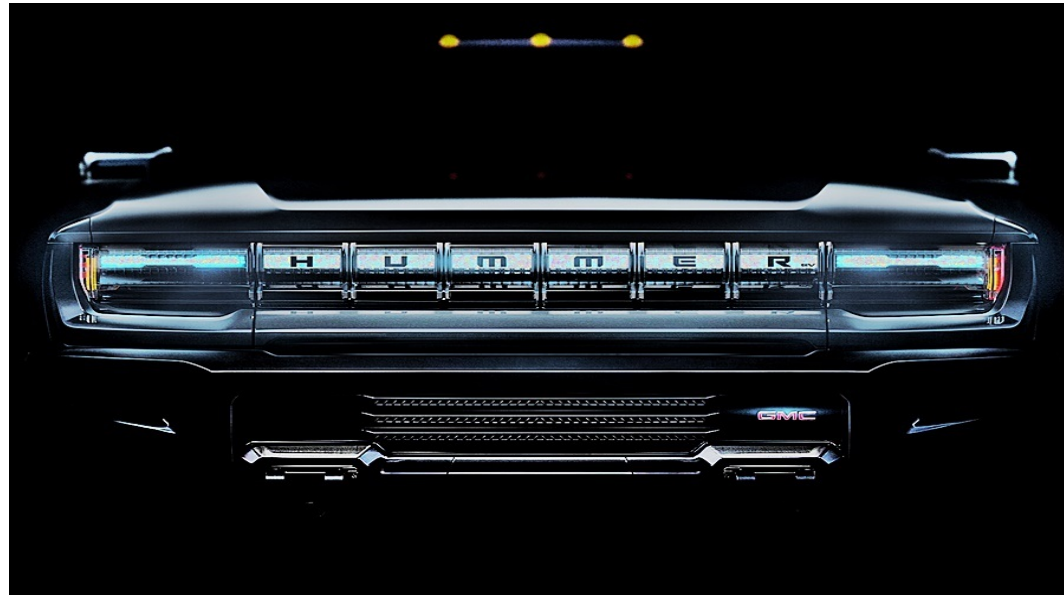
The automotive industry's technological advancements are changing faster than anytime in history. How do we keep up with this rapid change in Capital Project Execution? The answer -- IPD

- ❑ General Motors Company Overview
- ❑ GM Lean Journey
- ❑ Ultium Cells, LLC Battery Plant
- ❑ Lessons Learned





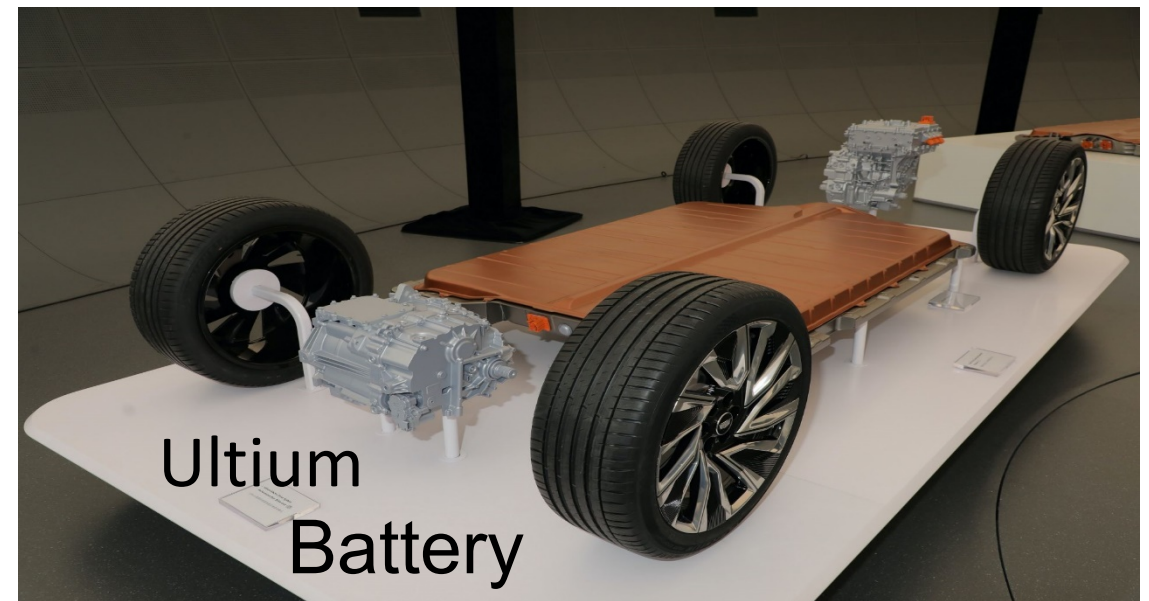
# General Motors Company Overview



Nikola Badger



Cadillac Lyric



Ultium  
Battery

# GM Lean Journey



Creation of High-Performing Team



Lean Culture



Last Planner System



Measurement and Learning



Co-Location



Innovation & Technology

Engage the team in  
**collaboratively**  
establishing culture,  
goals and success  
criteria to achieve  
**buy in** and create a  
sense of  
**ownership**



# GM Lean Journey

 2018 Start of Integrated Project Delivery

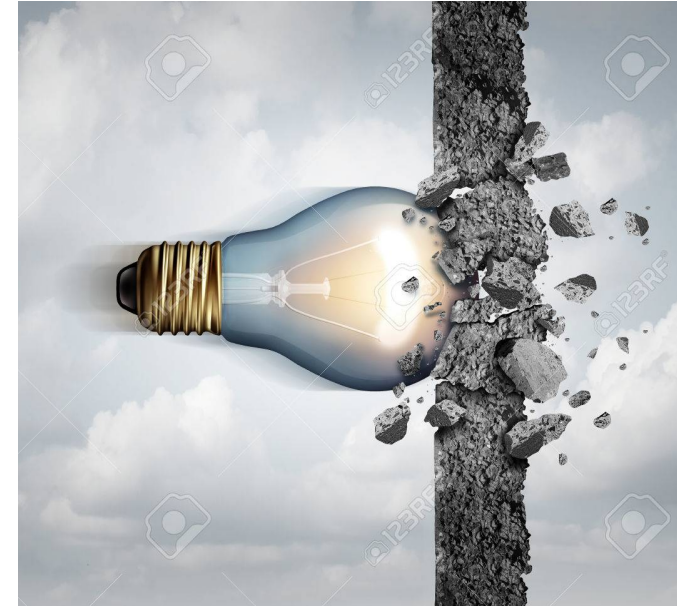
 Gain Internal Approval

 Procure Legal Services

 GM T&C's

 Team Selection Process

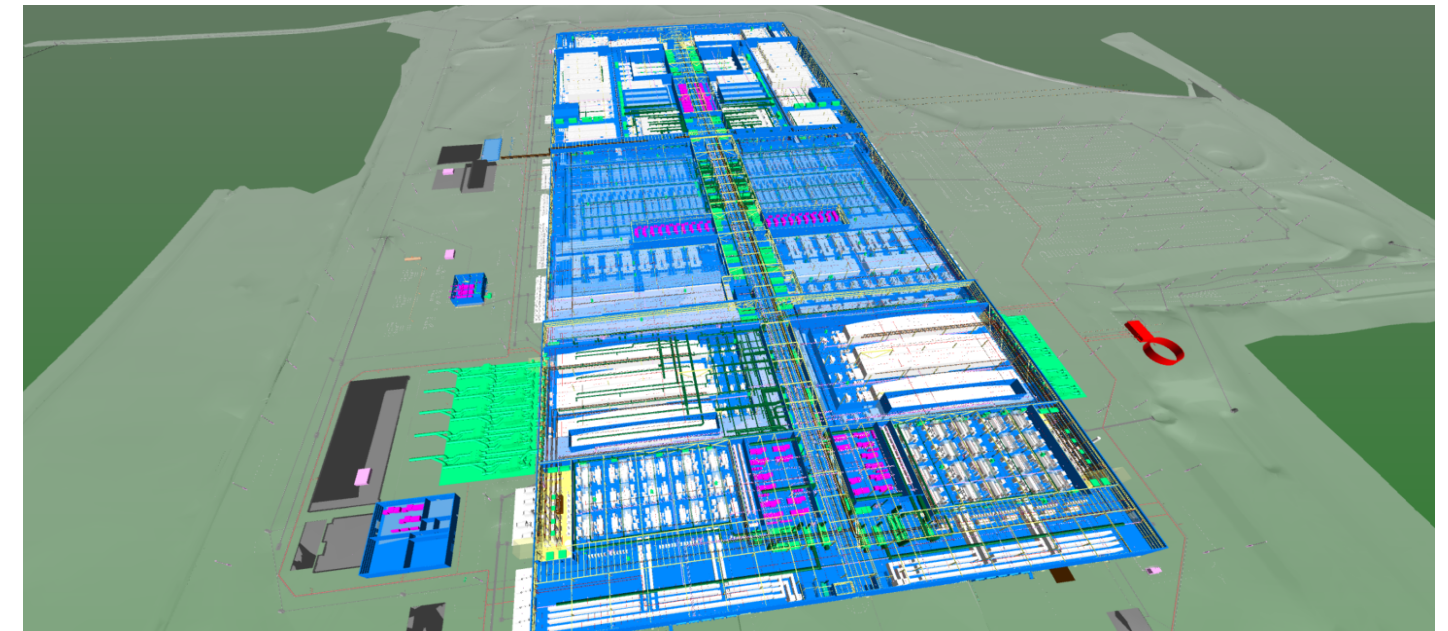
- ✓ Business Enterprise
- ✓ Lean
- ✓ Equal Perquisites
- ✓ Cost



# Ultium Cells, LLC Battery Plant

## ❑ Project Information

- ❑ Greenfield Site in Ohio
- ❑ Required Wetland Mitigation
- ❑ 3 Million Square Feet
- ❑ Issued an RFP 10/30/19
- ❑ Conducted Interview week of 11/4/19
- ❑ Awarded PO 11/14/19





# Ultium Cells, LLC Battery Plant

- ❑ Original Building Construction Timing
  - ❑ Construction Start 8/1/20
  - ❑ 6/30/22
- ❑ Revised IPD Team Timing
  - ❑ Mobilized Construction - 4/1/20
  - ❑ Building Complete the First Quarter 2022





# Ultium IPD Team

- ❑ Kick Off Meeting 1/6/20
- ❑ Set Up Big Room & Co-Location
- ❑ Lean Coach
- ❑ Team Structure
  - ❑ Senior Management Team
  - ❑ Core Team
  - ❑ Cluster Groups
- ❑ Effects of Covid-19





# Lessons Learned - IPD

- ❑ Ensure Internal Company Buy-In
- ❑ Team Culture
- ❑ IFOA Contract
- ❑ Training the Team





# Ultium Cells, LLC

Progress 9/15/20







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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

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**Thank you for attending this presentation. Enjoy the rest of the 22<sup>nd</sup> Annual LCI Congress!**