INTEGRATED PROJECT DELIVERY: COMPLICATED COLLABORATION OR IMPROBABLE PANACEA

William A. Moylan, PhD, PMP and Nadia Arafah, ABD

2017 Project Management Symposium
Presenter – Nadia Arafah, ABD

- Doctoral Student for PhD-Technology with focus in Interior Design, Eastern Michigan University.
Presentation Agenda

- Executive Summary
- Background to Constructed Facility Project Delivery
- Integrated Project Delivery [IPD] Primer
- IPD Benefits & Challenges
- Questions & Comments
Background

CONSTRUCTED FACILITY PROJECT DELIVERY
Construction Contractual Arrangements

- Fixed-price or lump-sum contracts.
- Unit-rate contracts.
- Cost-reimbursable contracts.
- Time and materials contracts.
Facility Project Delivery Approaches

- Design-Bid-Build (traditional method)
- Design-Build
- Turn-key
- Construction Management
- Single-source, non-competitive
- Design-Build-Operate-Maintain-Transfer
IPD – A NEW DELIVERY APPROACH OF COLLABORATION & TRUST
Working Definition of IPD

- Project delivery strategy that integrates people, systems, business structures, and disciplines
- Collaboratively manages the expertise of all participants in the project to reduce waste and optimize efficiency

AIA California Council (2007/2010)
IPD Methodology
IPD Essential Principles

- Mutual Respect / Mutual Benefit
- Early Goal Definition
- Enhanced Communication
- Clearly Defined Open Standards
- Appropriate Technology
- High performance / Leadership (AIA, 2007)
IPD Benefits

- Improved Project Execution
  - Cost Budget Performance
  - Execution Time Efficiency
  - Overall Quality of the Facility
IPD Benefits

- Trusting Partnerships
  - Improved Team Relations
  - Less Waste
Facility Owners

- Must lead paradigm shift
  - Exhibit willingness to change
  - Take risks
  - Develop culture of trust (COAA, 2016)
Challenges Using IPD

Designers

• Joint responsibility

Design and Construction

• Higher level of effort early on

• Responsibilities don’t end with issuing construction documents
Challenges Using IPD

Construction Firms

• Involved at onset / selected on qualifications rather than lowest price
• BIM requires significant investment in set-up time and upfront training
Conclusions

• Benefits
  – Improved project performance
  – Trusting partnership

• Costs
  – Early involvement with detailed planning
  – Team development
  – Investment in BIM technology
  – Shared risks [waiver of liability]
Conclusions

• Improvements in long term relationships
  – Leads to repeat business

• Collaborative approach allows informed decision making early in project
  – When most value created
  – Eliminates waste in the design
QUESTIONS / COMMENTS
Any Further Questions?

Contact Nadia Arafah

narafah@emich.edu
Thank you