Evolution of Relational Contracting in Construction
Project Delivery Methods Beyond Partnering

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Purpose

The AFIT of Today is the Air Force of Tomorrow.

- Overview of Relational Contracting
  - History and Evolution of Delivery Methods
    - Traditional--Partnering--Alliancing
- Partnering vs Alliancing
- Key Practices of Alliancing
- Commercially Available Alliance Contracts
  - Differences and Benefits
- Conclusions
Relational Contracts in Construction

• Military construction is an exceptional example of managing operations between civilian and military

• Construction contracts cannot provide sufficient provisions for every possible future event

• Contracts must focus on relationships and be able to adapt to change (Macneil, 1974; Walker, 1989)
  • Basis of Relational Contracting
Relational Contracting Origins

- U.S. Army Corps of Engineers Utilize Partnering Agreements
  - First Used for Oliver Lock and Dam Project, 1988
- Proved a Success (Weston & Gibson, 1993)
  - Improvement of 40-80% in:
    - Cost change
    - Change order cost
    - Claims cost
    - Duration change
- Partnering Set as Standard Policy in 1993
Basis of Partnering

- Partnering Agreement (Non-Contractual)
  - Trust and Relationship Development
    - Team building
    - Communication protocols
    - Stakeholder commitment
  - Dispute Resolution Procedures
- Mutual Goals and Performance Measures
Shortcomings of Partnering

- Partnering Agreement is not Contractual
- Non-Binding Dispute Resolution Procedures
- Sets Goals, but Often No Definite Enforcement or Incentives
- Gains and Losses Still Allocated Severally
- Does Not Override Contract
- Ultimately Rewarded for Acting in Own Interest
Alliancing Origins

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• Partnering Evolved in 1990s in UK, Hong Kong, and Australia
  • Hong Kong: Expanded Partnering
  • UK: Second and Third Generation Partnering
    • New Engineer Contract 3rd Edition (NEC3)
      Engineering and Construction Contract, 2005
  • Australia: Project Alliancing
    • Executed $30B (AUD) in Alliance Projects
Basis of Alliancing

- Relationship Management and Project Delivery
  - Collective Ownership of Risk
  - Parties Share in “Pain” or “Gain” of Project Outcomes
- Project Governed by Joint Body
  - Decisions made unanimously
Alliancing in United States

- Integrated Project Delivery (IPD)
  - Sutter Health Contract 2005
- Two Commercial Standard Form IPD Contracts
  - American Institute of Architects
    - AIA C191-2009
  - ConsensusDOCS
    - ConsensusDOCS 300, 2007
Alliance Contracts

- ConsensusDOCS 300 (2007)
  - *Standard Form of Tri-Party Agreement for Collaborative Project Delivery*
  - *Standard Form Multi-Party Agreement for Integrated Project Delivery*
- New Engineering Contract (NEC3) (2005)
  - Engineering and Construction Contract
  - w/Clause X12: Partnering
Alliancing Key Practices

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- Joint Decision Making
- Shared Risk
- Pain/Gain Sharing
- Dispute Resolution
- Budget Development and Management
Joint Decision Making

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• Executive Team
  • Executive Oversight and Decision making
  • Representatives of Owner, Designer, Constructor
  • Decide by Consensus/Unanimity (Lacking consensus, Owner makes determination)

• Management Team
  • Day to Day Project Management
  • Representatives of Owner, Designer, Constructor
Joint Decision Making

ConsensusDOCS 300
- Executive team: Decide by consensus
- Management team: *No formal decision process*

AIA C191-2009
- Executive team: Decide by unanimous decision
- Management team: *Decide by unanimous decision*

NEC3 ECC w/ X12
- Executive team: *No formal decision process*
- *No Formal Management Team*
Shared Risk

ConsensusDOCS 300
- Shared Liability
  - Parties Release Each Other From Non-Negligent Claims
- Waive Consequential Damages
- *Traditional Liability Option w/Optional Liability Limits*

AIA C191-2009
- Shared Liability
- Waive Consequential Damages

NEC3 ECC w/ X12
- *Clear Division of Risk*
Pain/Gain Sharing

• Gain Sharing
  • When Costs are Less Than Target, Parties Share in Profits

• Pain Sharing
  • When Costs Exceed Target, Parties Share in Losses
  • Designer and Constructor Losses may be Limited to Overhead and Profit

• Incentive Program
  • Incentive Payments for Performance Benchmarks
Pain/Gain Sharing

ConsensusDOCS 300
- Gain Sharing Distributed by Agreed Percentages
- **Optional** Pain Sharing
  - Agreed Percentages
  - **Optional** Loss Limits

AIA C191-2009
- Gain Sharing Distributed by Agreed Percentages
- Pain Sharing
  - Agreed Percentages
  - Loss Limits

NEC3 ECC w/ X12
- Gain Sharing Distributed by Agreed Percentages
- Pain Sharing Distributed by Agreed Percentages
Dispute Resolution

- Management Team Discussion (Direct Discussions)
- Executive Team Decision
- Mitigation or Mediation
  - Non-Binding Resolution Assistance from Third-Party
- Binding Arbitration
  - Binding Decision by Third-Party
- Litigation
Dispute Resolution

ConsensusDOCS 300
- Executive Team Decision
- Mitigation or Mediation
- Binding Arbitration or Litigation

AIA C191-2009
- Executive Team Decision
- Mediation
- Binding Arbitration, Litigation, or Any Other Agreed Method

NEC3 ECC w/ X12
- Executive Team Decision
- Binding Arbitration
- Litigation
Budget Development and Management

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- No Formal Cost at Contract Formation
- Preliminary Cost Models Developed at Project Start
- Cost Models Progressively Updated as Design is Completed
- Target Cost Set at or Near 100% Design
- Final Costs Determined at Completion
<table>
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Alliancing Benefits

The AFIT of Today is the Air Force of Tomorrow.

- Clear Organization of Management/Oversight Teams and Processes
- Shared Risks and Rewards
  - Elevates Collective Interests Above Individual Interests
- Clear, Pre-Defined Dispute Resolution
- Improved Cost Accuracy

![Diagram of Cone of Uncertainty](Adapted from Gannon, 2011)
Alliancing Limitations

The AFIT of Today is the Air Force of Tomorrow.

- Commitment
  - Contracting, Organization, and Documentation
  - Management Participation
- Shared Risk
  - Insurance Challenges
  - Legal Challenges
- Lack of Quantitative Research of Benefits Over Partnering
Questions?