



Evolution of Relational Contracting in Construction

Project Delivery Methods Beyond Partnering

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Purpose



- 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

- 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



- 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
- American Institute of Architects (AIA) Doc. C191-2009
 - 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



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



Joint Decision Making



- 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



The AFIT of Today is the Air Force of Tomorrow.

Consensus DOCS 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



The AFIT of Today is the Air Force of Tomorrow.

Consensus DOCS 300

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

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- 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



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Consensus DOCS 300

- Gain Sharing Distributed by Agreed Percentages
- Optional Pain Sharing
 - Agreed Percentages
 - Optional Loss Limits

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- 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



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Consensus DOCS 300

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

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- 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 The AFIT of Today is the Air Force of Tomorrow.



- 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



Partnering vs Alliancing



The AFIT of Today is the Air Force of Tomorrow.

Partnering

- Non-Contractual Agreement
- Trust & Relationships
- Non-Binding Dispute Resolution
- Division of Risk/Liability
- Mutual Goals
- Traditional Budget
 Management

Alliancing

- Contractual Agreement
- Joint Decision Making
- Binding Dispute Resolution
- Shared Risk/Liability
- Profit and Loss Sharing
- Progressive Budget Development

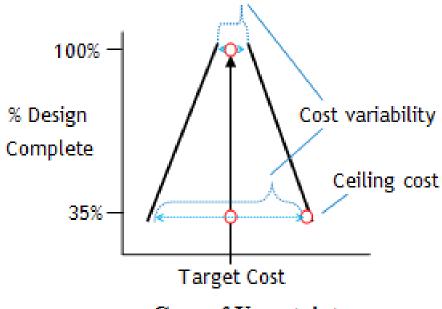


Alliancing Benefits



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



Cone of Uncertainty (Adapted from Gannon, 2011)



Alliancing Limitations



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





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Questions?