

Lean Construction Institute - Relational Contracting Symposium
November 18-19, 2004
Searching Questions from Participants

These questions were generated by participants in the Symposium after presentations had been made. Subsequently, the group voted for those questions and topics they would like to discuss during the Symposium.

- How to begin thinking about identifying the value of a project without tying it to the cost?
- What's stopping PPC2000, NEC, etc. from coming to the USA? What are the obstacles of RC spreading across the pond to the USA and within the UK and elsewhere in the world?
- What are the implications for the future structure of the industry? Structure of the relations between firms - moving toward hierarchies and cross-hierarchies – implications for competition.
- How to add flexibility to projects - through organizations or through contracts?
- Be careful about having competitors on the same team - competitors perhaps in a domain outside this project.
- Explore issue of capital and operating budgets.
- How to measure subjective goals?
- What does 'real time management mean?
- What is the best form of relational contract in use? Which of the various forms are competing with one another, and which are appropriate for different applications?
- Selection criteria and processes.
- How should owners manage risk?
- How to advertise to owners?
- How do you pre-qualify owners?
- Discuss how to pre-qualify partners.
- How can attorneys aid the RC process; what are the opportunities/stumbling blocks?
- Where are the architects? - concerns and disadvantage - how to generate value.
- How much influence do relational contract terms (eg. collaboration, co-operation, mutual trust) have on the parties' actions?

- What is the proper role of incentives?
- RC has a spectrum of experience, interest, opportunity for the CM, GC and sub contracts with subs and suppliers
- Better understand the limitations of various ways of structuring compensation, how they can be strengthened, and when they are best used; specifically fixed price and cost plus.
- How are we going to do the work; when you add lean to RC – how will Lean improve the relationship. How can you marry lean and RC?
- What are the social issues around competition; how do you keep it from sliding off the side of the world?
- How to add flexibility into org/contracts/process and think together?
- How does RC transfer down into the workforce?
- Robert Gerrard said ‘People or words?’. So do we: develop trust (people) or force trust (words - contracts) or do we need both? ‘Trust but verify’ – R. Reagan
- What other methods exist that align interests between owners and contractors?
- Resources
 - Intro to alliancing - Ross
 - What are other resources - send to Greg Howell.

Friday – Searching Questions Breakouts and Presentations
Relational Contracting Symposium
November 19, 2004

1 - How to measure subjective goals?

Possible Criteria

- Innovation – ideas generated/adopted/measure \$/time impede/use plus deltas
- Quality – punch, re-inspections, call backs, user satisfaction
- Sustainability
- Collaboration – develop process and systems/ contracts to support/peer evaluation
- Fitness of program – user satisfaction
- Commitment based planning – pull planning meeting, held, complaint, efficient, based on ‘pull’
- Constructability
- Process – plus/delta process/ 5 why’s/ Pareto chart
- Learn as you go – periodic evaluation
- Creation of value
- Team satisfaction: 360 review
- Leadership attitude/team satisfaction/ assume responsibility/results
- Communication – info distribution Just In Time/evaluate /proper time - proper method
- Balance between effort vs. outcome; performance matters; some don’t need incentives

2 - How to add flexibility in projects – through organizations or contracts?

It was felt that the question was really about whether organizations (people) or contracts were the best way to allow/ensure a flexible and innovative response to the challenges of the construction process. The consensus was that the cultural changes necessary to achieve this involved trust + ownership + therefore was best delivered through organizations. However, some projects find it difficult to make the leap of faith necessary to deliver the changes. So new relational based forms of contract which facilitate enhanced relationships rather than being “weapons of war” are likely to be essential to support the process. A key issue in moving to “flexible” projects is the rock of the client business case as the root of any meaningful process.

3 - What is stopping PPC 2000 and NEC and the relational contracting ideas from spreading in the UK and coming to the US?

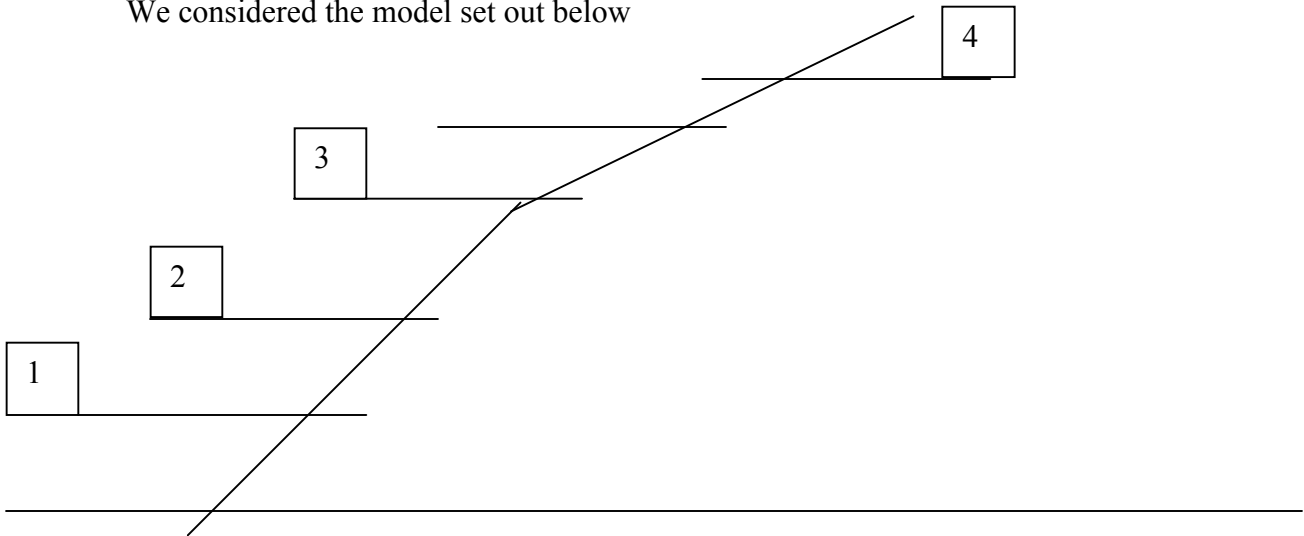
We first considered elements in UK experience that had helped to promote change. These included the following:

- Having a local champion – someone internal or external to the organization who is prepared to drive change forward and promote the new form of contract;
- Ability to demonstrate evidence of the contract working in practice in different sectors – this is to ensure that cynics can see that the contract does work;
- It's not enough to change contracts; the key is to change behavior. Change in behavior goes hand in hand or proceeds the implementation of a new form of contract.
- Establishing that there is a need for change and need for more incentive – for example the Sutter Health example that the organization needs to create a new form of contract to meet a deadline and is needed to change working practices;
- Identifying owners and contractors who are receptive to change.

Having agreed that a key to promoting change is to identify receptive owners, we considered how to persuade owners to change or to experiment:

Identifying Key Owners

We considered the model set out below



This proposes that there are 4 types of organization/person. The first are those who will embrace any change, the early adopters (perhaps 3%); the second is those who take on new ideas based on the prospect of gain, the innovators (perhaps 10%); the third is those the majority of people who are moved to change only by the threat of loss, or can see the benefits gained by the innovators (perhaps 77%), and then the fourth group are the laggards who would just as soon as die before they change (perhaps 10%).

The strategy for promoting change depends on the stage of development of an innovation such as relational contracting/lean, and on whom one is attempting to persuade.

What beliefs and fears prevent pilots?

- I'm the best I can be
- Fear of the unknown or change
- Experience with the flavor of the month concept
- Distrust of collaboration
- Reluctance to invest in the front end
- Time pressure and funding
- "Buy-out" mentality
- I can't get in trouble for "Buying Caterpillar" or for competitively bidding all contracts

What can be done to overcome these fears and false beliefs?:

- Change public opinion – by education, attending conferences, writing papers. Academics could help owners understand that this new way of working doesn't put them in a more vulnerable position + can produce benefits
- Act in the market – prove by example and create competitive pressure.
- Educate buyers what to demand of their suppliers and how to help their suppliers develop those capabilities.

We agreed to take forward one of these actions immediately by creating papers on relational contracting and lean construction as a follow up to this symposium—to be published in a special issue of the Lean Construction Journal, targeting early adopters and innovators.

4 – How to deploy RC into the workforce?

- Currently efforts at partnering involve mainly owner and first tier team—at least in U.S. construction
- Start with bringing team together – ensure influence and better decisions
- Partnering agreement to work together
- How have the contract concepts been communicated to the workforce?
- Strive to create 'relationship' with workforce. Provide 'sense of self worth'; capture knowledge & drive up. (not necessarily at the start of contract but have mechanism in place)
- Include 'Last Planner' concept in contracts
- Early simultaneous involvement of specialist/trades – (provide access to workforce knowledge base)
- Dedicated supply chain (resistance and sharing)
- Must be strategic & multi-tiered (agree on objectives and include largest amount of supply chain for project)

- Integrate workforce need/desire/empowerment into RC
- Training/educational (culture) (project/company/etc)
- Develop an ‘agreement’ worker signs (part of RC) –(include engaging workforce)
- Principles
 - Don’t do anything that is contrary to the spirit of the relational contract
 - Don’t impede the work of others (for example, by doing work out of sequence)
 - Don’t sit on your ideas
 - Don’t leave the job until you know what you’re planning to do the next day
 - Don’t accept an assignment that cannot be performed correctly or safely
 - Provide feedback when you have something to say, and when requested
 - Relational contract should communicate management’s commitment to optimize performance at the level of the project, and to not push for local optimization of resources

5-What is the Proper Role of Incentives?

Incentive Types

1. Increased Profit – (Shared Savings)
 - *Shared Savings incentives can be used to save both time and money*
2. Bonus to meet Milestone Goals
 - *Specific Goals such as Safety, Quality, Schedule. and Innovation can be the focused.*
3. Repeat Work
 - *One of the primary goals of doing quality work*
4. Personal / Team Satisfaction
 - *Not all goals are monetary*
5. Merchandise / Events / Food
 - *Team Luncheons, Barbecues, etc. to recognize effort as well as results.*
6. Recognition Awards
 - *Personal / Team Certificates Awards given at meetings is a strong motivator*
7. Expansion of Business
 - Geographical
 - *The opportunity to expand your business into other localities*
 - Other Lines
 - *The possibility to expand your service sector*

Always Team Based with flow to all levels

How Incentive Types Can be used (*All types of incentives above can be applied to Items listed below*)

1. Encourage Desires, Behaviors and Outcomes
2. Be an Attractive Client
 - *i.e. Sutters use of advertising stating that they want their team to be financially successful, to attract the best of the best.*
3. Encourage Innovation
 - Design

- *Design Assist, etc. to get best value of VE during design*
- Execution
 - *During execution - Means and Methods savings*
- 4. Focus Team on specific Target Issues
 - *Milestone, Completion, Safety, Quality, Innovation Etc.*
- 5. Team Building – Collaboration / Alignment
 - *Encourage communication within entire team*
- 6. Recognize Exemplary Behavior
- 7. Discourage Bad Behavior
- 8. Keep Project linked to Business Case
 - *Keeps all team members focused on maintaining value and feasibility*
- 9. Create Value and Eliminate Waste

6 - How to begin thinking about identifying the value of a project without tying it to the cost?

New Question (posed by Owen Matthews)

How do we value what we contractors measure and discuss value with customers other by summing cost and adding a percentage for profit and overhead? This seems like the question of accounting for market forces.

Theme 1

Need to understand what the customer wants.

Theme 2

Return-on-Investment (ROI) seems to be the where most customers (construction buyers / owners) start and end.

Theme 3

Dollars are the unit of measure in most cases, but not all. Safety is a case of having other metrics.

Qualities that cannot be measured and reported in dollars seem to be ignored in the end.

Non Cost Elements

ROI

Functionality

Comparables (Selling price in the market)

Total cost of ownership

Time to market

Social impact

Innovation / creativity in meeting the customers needs

Contract administration such as processing change orders and resolving disputes.

Steps in Getting to Value-Based Projects

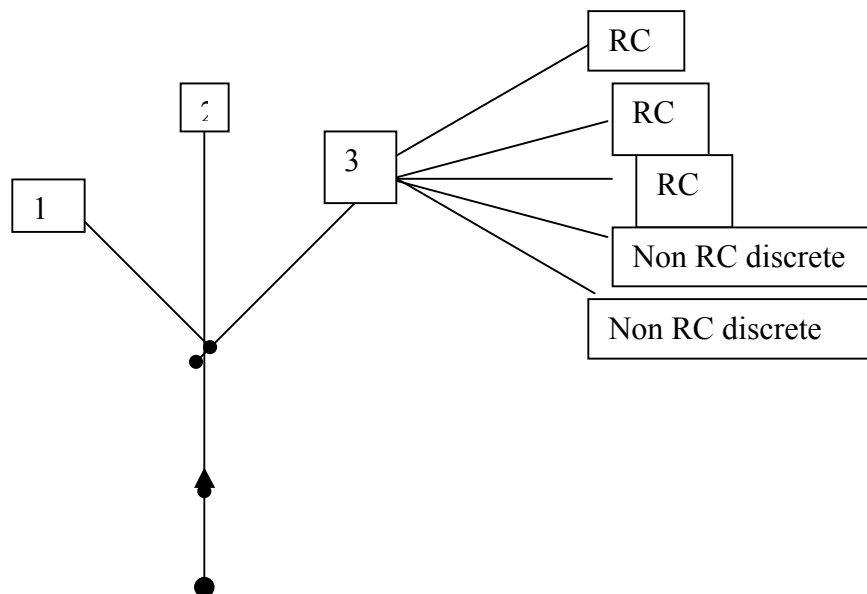
1. Get to the table with the customer to ask the question of what the she / he / they want
2. Identify the customer's goals and expectations
3. Measure goals in terms of metrics and key performance indicators (KPIs)
4. Develop a range of solutions that can be measured to meet and exceed these goals

7 - Selection Criteria & Processes

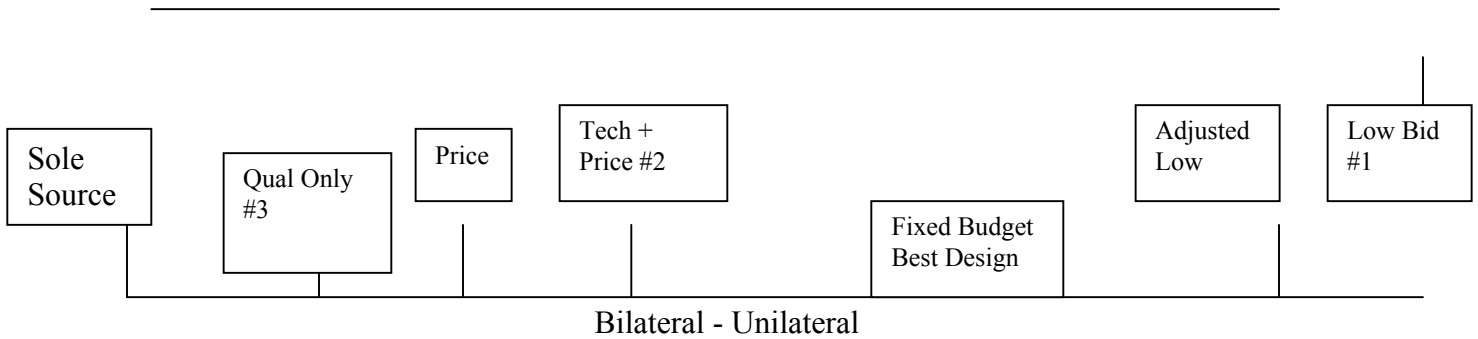
We tried to answer this broad question in the context of relational contracting and the built environment. We considered that an ACQUISITION is being made and there are 3 ways this could be done.

Consider: ACQUISITION

1. state action i.e. force
2. rent, lease or buy
3. assemble goods & services * (project delivery)



We assumed the area of concentration is in 3 above and as a sub-set concentrated on the tendency towards relational contracting.



We then looked at the selection criteria likely to be considered in the range of options above.

Selection Criteria

-
- lowest price
 - price 1st; compromises outstanding project outcomes
 - represents discrete transaction
 - MEAT/best value – balance of price/quality
 - Past performance
 - Experience in field
 - Technical solution
 - Scheduling
 - Scheduling ability/project controls
 - Quality control
 - References
 - What team/people are proposed
 - Safety and security
 - Environment/sustainability
 - RC/partnering record
 - Price/alternatives

So,

- Price: quality (technical solution and management plan)
- 80:20 to 50:50
- Qualification only
- Full alignment
- Win/win (or lose/lose)
- 3 C's – character, capacity, competence
- hard information
 - track record, refs, etc
- soft information
 - beauty parade, tests, etc.
- confidence – right partner for the job

8 - Value Apart From 1st Cost Understand - What Customer Wants

- ROI (rental property) – owner’s measure
- Non directs
 - Functionality
 - Comps (selling price)
 - Total cost of ownership
 - Time to market
 - Social impact
 - Innovation/creativity
 - Contract administration
- Process
 1. Get to table ask questions
 2. Identify goals/expectations
 3. Measure goals/KPIs/metrics – Dollar as unit of measure (mostly)
 4. Develop plan to meet/exceed goals reported with metrics

**LCI Relational Contracting Symposium
November 18-19, 2004**

End of first day Plus/Deltas

Deltas

- The hum in the A/C system
- Stay on the schedule
- Ran out of coffee
- Never got ice cream
- Collect probing questions after each speaker
- Need more practical applications – get off the theory
- Expand further on case studies
- Bring architects into the discussion
- How to pre-qualify owners

Pluses

- Supporting documentation provided in packets
- Relational theory at the start good
- Real life examples by Owen Matthews
- Matt S. presentation good example –
- Liked how to's today and want more
- Experts from international arena great
- Facilities good except the “hum”

Friday Plus/Deltas - PM

Pluses

- Ice cream very good
- Break out sessions and discussion
- Seminar design good – presentations; then breakouts
- Will Lichtig's presentation very good on Friday morning
- Excellent panel of speakers
- Dispelled the myth of lawyers

Deltas

- Don't wear the ice cream
- Would have liked to be in all of the breakout sessions
- Have to keep everyone here until the end of the meeting
- Consider a format that starts on the evening of first day, all day second day and _ day on last day.

Action Items

For LCI

- Plan a follow up to the RC symposium
- Have owners and others present and utilize their experience

- Develop and apply metrics to experiments underway – learn also from failures – Rosalie Brockman/Dow to provide questions
- Set up a bulletin board for sharing inputs, questions and answers for RC – Johna to look into for LCI
- Develop a strategy for deployment of others vs. RC way – e.g. ABA – LCI R.C. committee
- Everyone discuss RC with folks – all