



EPCM Conference – Canadian Institute

Effective Contracting Strategies

Calgary, October 11, 2012, John Zhao, MSc.

A True Story

In Alberta construction market, to initiate A Lump-sum Contract for major project can be likened to suicidal duo to deepened local cultures and volatilities.

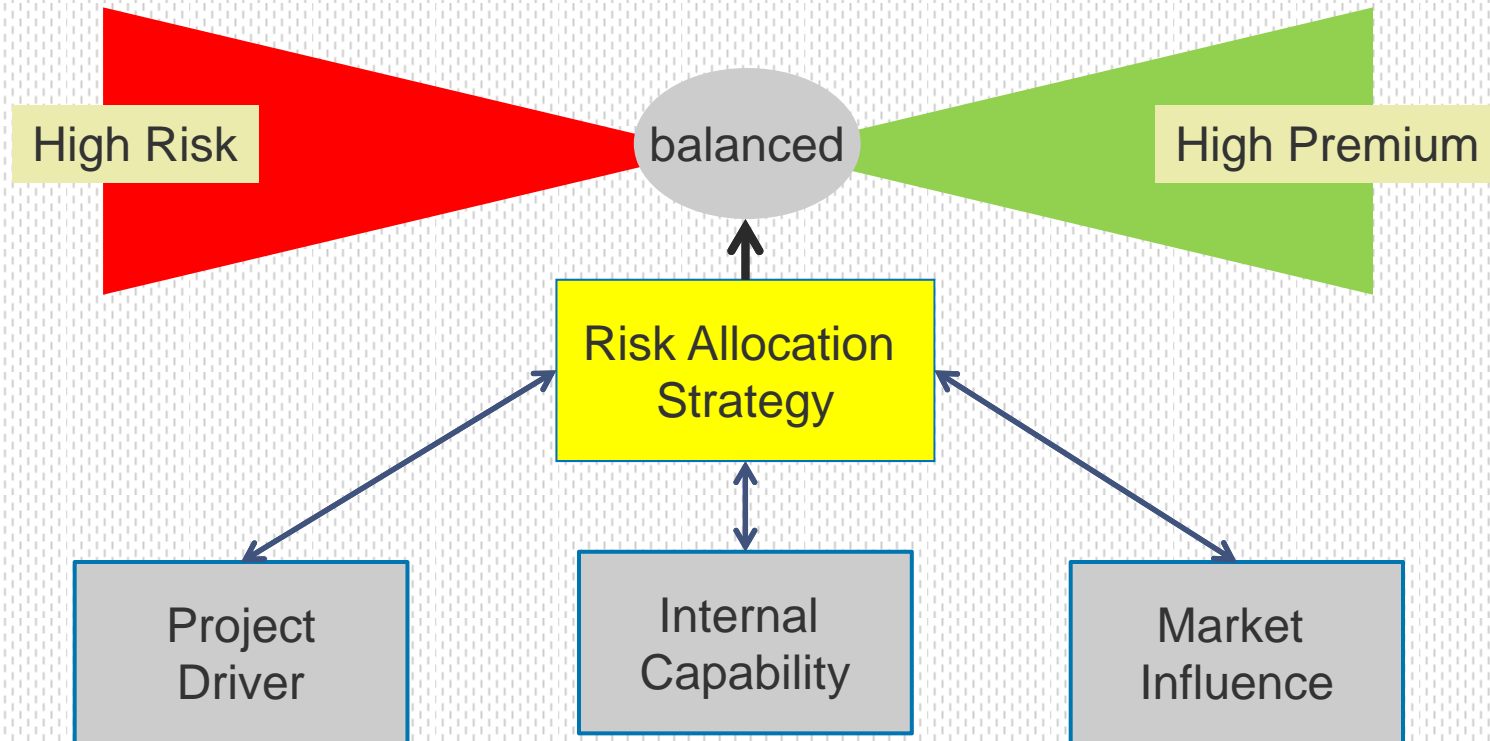
It is the international EPC firms who will venture and entertain the idea. A couple of owner companies are already on the LS journey or exploring the potentials.

“All is possible only if the leaders in owner organizations have futuristic visions with military style strategic plans and risk-taking attitude”.

David Safari, VP Major Projects

Background

A contract is never a fair mechanism to legally bind two parties. The pendulum is the risk that regulates balance.



Two Parties' Expectations

Owners Organization

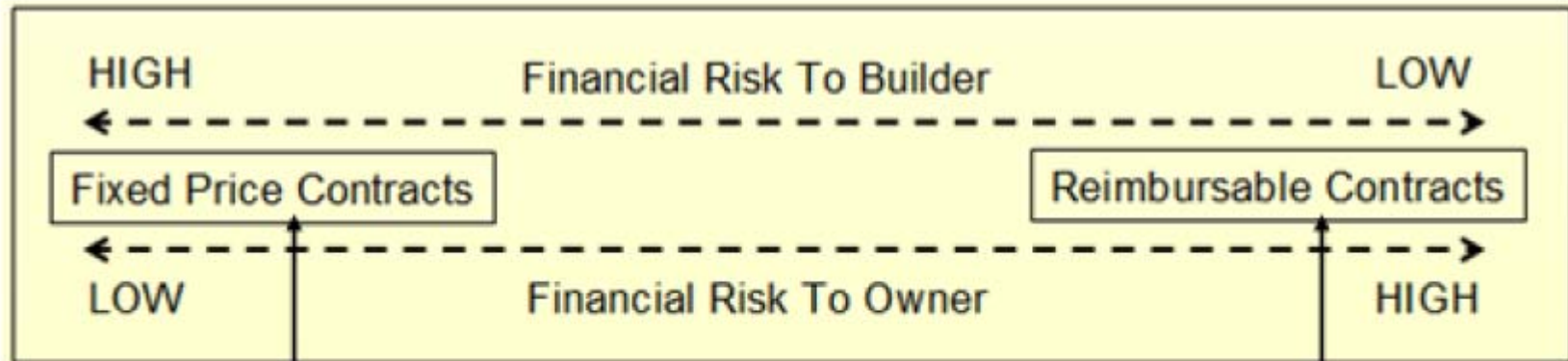
- Lowest Cost Certainty
- Schedule Predictability
- Total Control
- Flexibility to Change
- No Risk-taking
- Minimize Scope Change

EPCs Organization

- Maximize Profitability
- Willing to Take Risks
- Maximize Claims
- Control Changes
- Owners' design intent
- Self Autonomy



Two Risk Extremes



Traditional Strategy

Owner

Winner: price and schedule guarantee

Contractor

Loser: assumes entire project risks

Current Oilsands Strategy

Owner

Loser: assumes risks of cost overruns

Contractor

Winner: avoidance of cost risks

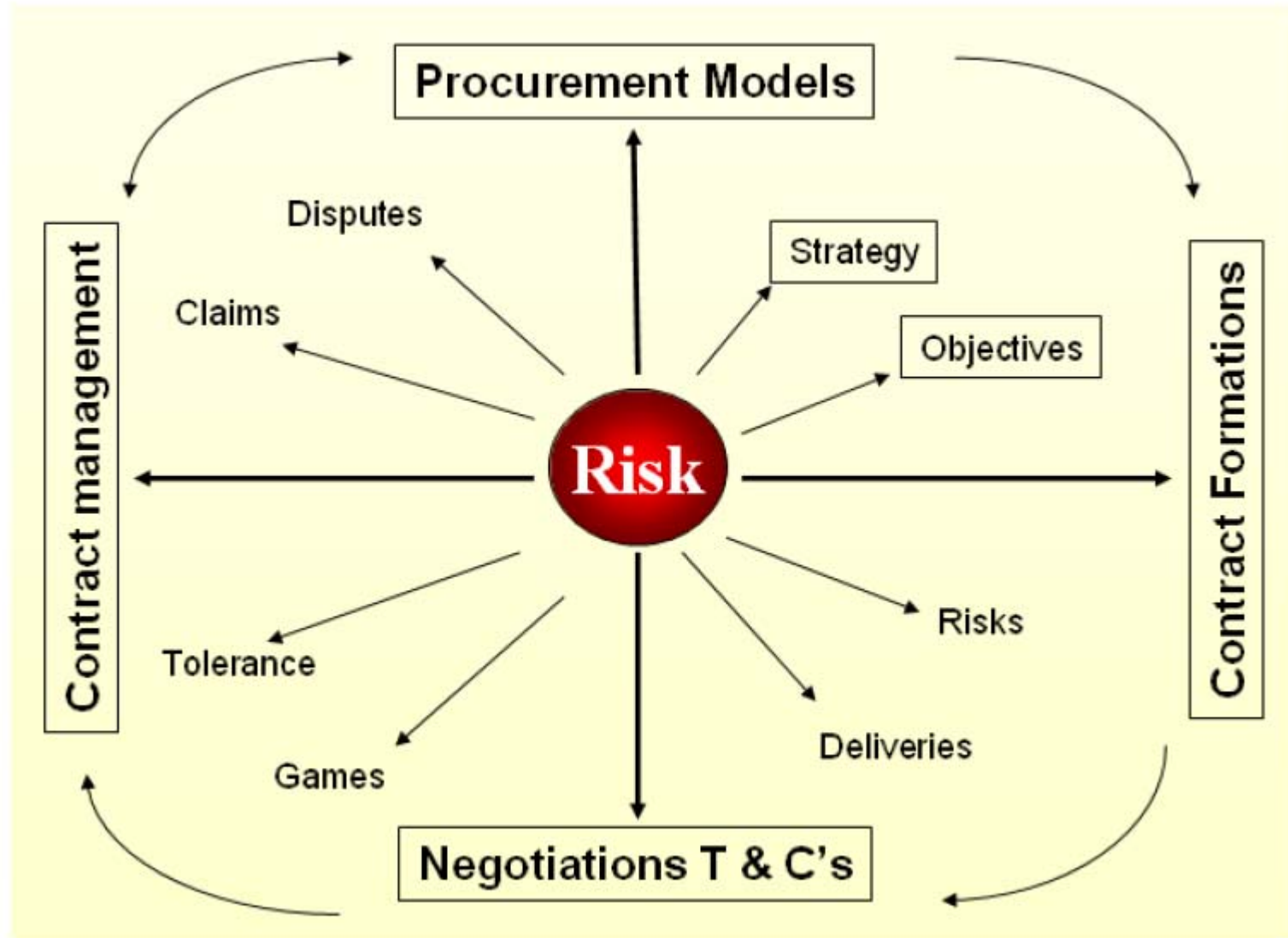
Middle / Far East Markets

Owner pays premium but transfers project risks

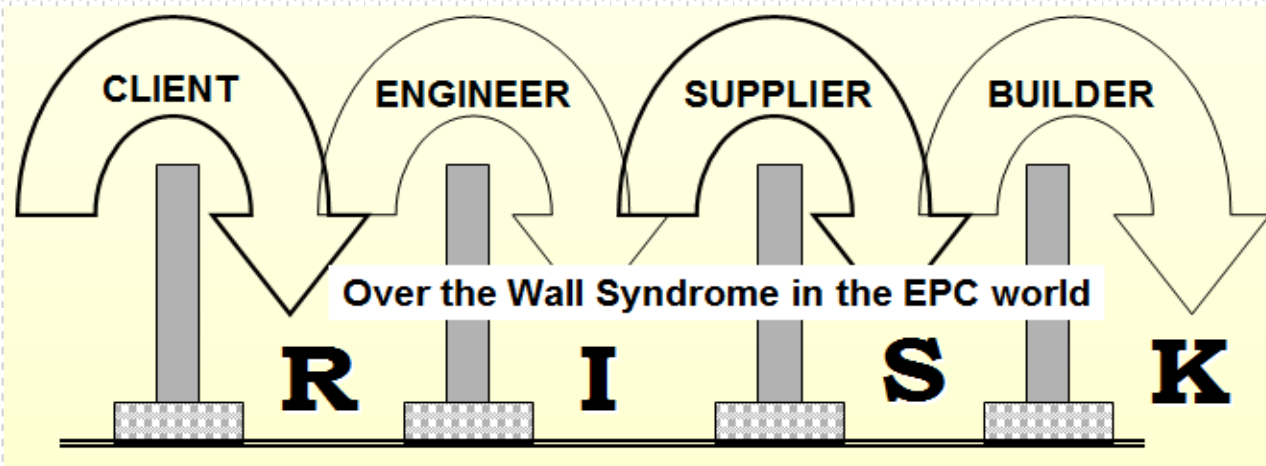
Alberta Market

Owner takes on all risks but still does not have any guarantee

The Cycle with Key Components



Risks in E.P.C. Value Chain



Client: is design basis clearly communicated?

Engineer: has he designed per “design basis”?

Supplier: are righteous goods supplied per specs?

Builder: are the final products what client expect?

It is an unhealthy practice in the industry to pass on “risks”

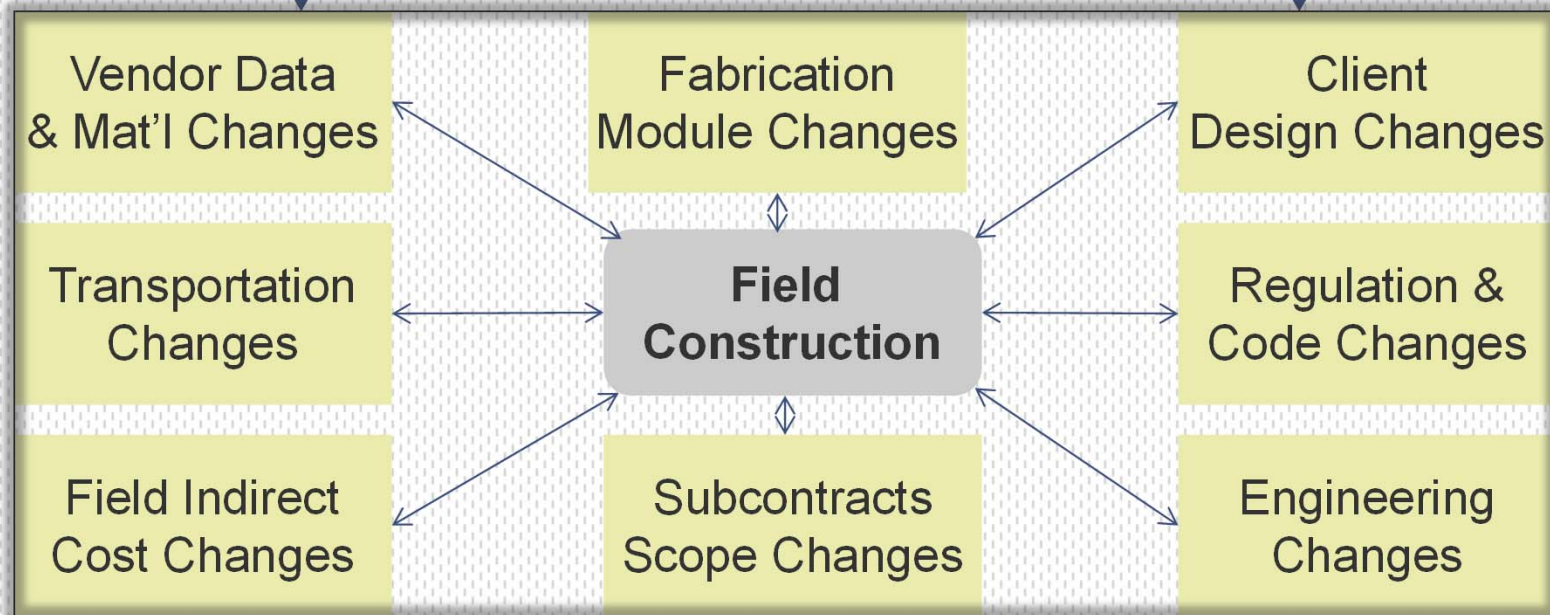


Engineering & Construction Risks

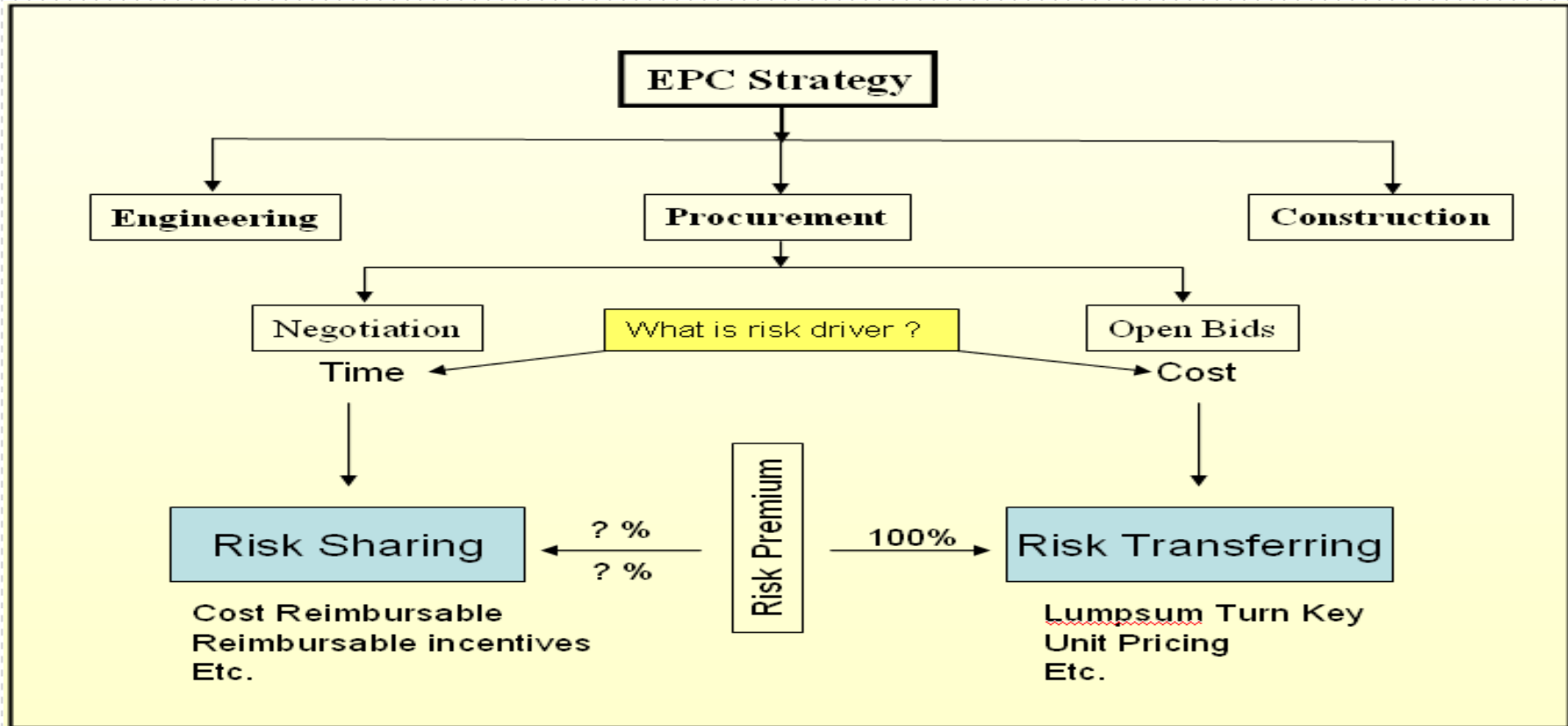
Engineering interprets the design intent and takes on all OWNER RISKS

Construction receives & takes on all DESIGN RISKS.

DESIGN TAKES ON RISK



Supply Chain Risk Management



CLIENT ORGANIZATION

- Select Project Model
- Agree on SCM strategy
- Assess internal competency
- Finalize contracting plan

EPC ORGANIZATION

- Be flexible with alternatives
- Build upon core competency
- Negotiate the best option
- Deliver as agreed in contract



THANK YOU

