Business Strategies in a Changing Project Delivery Environment

Construction Industry Roundtable

April 25, 2001
Washington, DC

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George B. H. Macomber Company
Objectives of This Roundtable

- Have a structured conversation
- Discuss what others are seeing
- Share best practices learning
- Facilitate networking
Growing the Bottom Line

- Grow the top line: more of the same
- Increase margins: do something differently
- Decrease risk: be more consistent
- Any other ways?
The AEC/EPC Supply Chain

- Consultant
- Engineer
- Permanent Finance
- Sponsor
- Owner/Operator
- End User
- Designer
- Material
- Project Finance
- Land and Permissions
- Constructor
- Subcontractor
- Labor
- Building Product Manufacturer
- Distributor
- Material
- CASH FLOW
- PRODUCT
The AEC/EPC Supply Chain: Owner/Sponsor Isolating Risk

Finance Risk

Market Risk

Design and Construction Risk

Consultant
Engineer
Designer
Sponsor
Owner/Operator
Permanent Finance
End User

Labour
Material

Subcontractor

Project Finance

Land and Permissions

Distributor

Building Product Manufacturer

Material

Finance Risk

Design and Construction Risk

Market Risk

Finance Risk
Indicators of Industry Profitability: “Five Forces” Model - M. Porter

Barriers to Entry - Low

Barriers to Exit - High

Supplier Bargaining Power - High

Buyer Bargaining Power - High

Existing Rivalry - High

Availability of Substitutes - Varies

AND
- No economies of scale
- Little IP opportunity
- Many “non-economic competitors”
### New Business Strategies: Which segment and why?

#### Form of Contract:

<table>
<thead>
<tr>
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<th>Closed Book</th>
<th>Open Book</th>
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</thead>
<tbody>
<tr>
<td><strong>Non Traditional:</strong></td>
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<td>e.g. ChipFab</td>
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<td>• Design - Build</td>
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<td>• Build - Operate - Transfer</td>
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<td>• Design - Build - Finance</td>
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<td>• Engineer - Procure - Construct - Operate - Maintain</td>
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<td><strong>Traditional:</strong></td>
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<td>e.g. School</td>
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<td>Design - Bid - Build - Claim</td>
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#### Basis of Payment:

- **Objective:** Coordinate and optimize whole
- **Objective:** Control; look out for single firm

Q: Opportunity for higher margins… Lower top line?
### Business Models to Address Profitability:

<table>
<thead>
<tr>
<th>Concept</th>
<th>Impact?</th>
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| Take on more contract risk roles - e.g. finance, design, operate       | More risk  
More responsibility  
Higher margins - maybe  
Higher top line if work is there                                           |
| Coordinate docs, communication with extranets, etc.                    | Less risk?  
What impact on margins?                                                   |
| Use multi-party contract - via lawyers or via insurance companies      | Less risk?  
What impact on top line?                                                   |
| Invest in procurement and knowledge management technologies             | Little impact on top line.  
What impact on costs and margins?                                           |
| Overcome fragmentation by introducing new economies of scale            | How?                                                                 |
| Coordinate supply chain: visibility into user, supplier demand & capacity | Can this be done?  
Who gets the benefits?                                                      |