



**Contractor Strategies to  
Mitigate Risk**

**Chatt Smith**

# Types of Project Risks

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• Project Execution

• Commercial

• Contractual

# Project Risks For Eng Contractor - Commercial/Contractual

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## Y Lost Future Business

Y Financial Loss

Y Lawsuit

Y Client Financially or Politically Insecure

Y Unreliable payments by Client (holdback)

Y Cash Flow Impact

Y Confidentiality concerns limit future work

# Project Risks For Eng Contractor - Commercial/Contractual

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## Y Lost Future Business

- Expectations not met
- Unsuccessful project
  - Y Poor Safety
  - Y High Cost
  - Y Excessive Schedule
  - Y Project performance sub-par

# Project Risks - Execution

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- ÿ Overall Cost
- ÿ Minimum Cost Growth
- ÿ Cash Flow Management
- ÿ Overall Schedule
- ÿ Minimum Schedule Growth
- ÿ Change

# Project Risks – Execution

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- New/unfamiliar technology
- Facility Reliability
- Product Quality/Rates
- Owner financial risk (shift to engineering/construction contractors?)

# Project Risk Mitigation - Execution

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- ÿ Clearly defined Project Goals and Objectives
- ÿ Staged Gate Project Process
- ÿ Integrated Teams (Owner, Engineer, Constructor, Operations, Maintenance, Key Suppliers, Technology Supplier)
- ÿ “Competent, Capable, Available” Team Members
  - Experience/expertise, Resource Availability (People, Offices, Tools), “Work Process Driven”,
- ÿ Scope and Expectations Documented & Agreed to

# Project Risk Mitigation - Execution

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## Y Good Front End Loading

- Scope Definition

  - Y Understand “current state” definition

- Estimate/Cost Definition

- Resource Loaded Schedule

- Project Execution Strategy/Plan

## Y Change Control Plan/Procedures

# Project Risk Mitigation - Execution

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## Y Risk Management Plan

- Know what you know and what you don't know or are unsure of and manage them
- Contract type (Reimbursable, Unit Price, Guaranteed Maximum Price, Lump Sum) should match
  - Y Level of project definition,
  - Y Degree of control by individual parties,
  - Y Parties ability to “absorb” risk

# Keys to Risk Allocation

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- Risk should be allocated to the stakeholder who can control it
- As stakeholder's risk "requirement" increases or ability to control risks decreases, stakeholder increases his costs to ensure business survival

# Mitigating Project Risks For Eng Contractor - Execution

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- ÿ Assess our Experience with Client (Company/PM)
  - Do their values, and goals align with ours?
- ÿ Investigate Financial/Political Stability/“Viability”
  - Local Work Environment?
  - Country’s Business Environment?

**Bid/No Bid decision??**

# Mitigating Project Risks For Eng Contractor - Execution

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- ÿ Do we have the right people (key personnel, numbers, location, and capability)? Single office, multi-office
- ÿ Are client's expectations/goals clearly documented and understood?
  - Are they reasonable?
- ÿ Assess technical risks?
- ÿ Partnering/Teaming requirements or needs (Technology Partners, JV, Specialty Subcontracts)

# Mitigating Project Risks For Eng Contractor - Contractual

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Y Contractual (Potential Costs match financial gain)

For Reimbursable contracts

WILD (warranty, indemnity, liability, damages)

- Warranty – re-performance of services
- Indemnity – comparative negligence
- Liability – cap on costs
- Damages – no consequential damages, unlimited liabilities

# Mitigating Project Risks For Eng Contractor – Commercial

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## Y Commercial

- Assess Market
- Balance/negotiate costs of potential risks (incl contractual) vs potential margin

# Processes to Mitigate Project Risks For Eng Contractor - Commercial/Contractual

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- Y Business Assessment for Submitting a Proposal/Bid
- Y Proposal/Bid terms based on Client's requirements and Engineering Contractor's business opportunity/risks
- Y Contract Terms and Conditions reviewed/approved internally (incl legal review)

# Processes to Mitigate Project Risks For Eng Contractor - Execution

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- ÿ Internal Project Strategy Meeting to ensure right resources, right plan, risks understood/managed
- ÿ Monthly project reviews by management
- ÿ Project Work Process Utilized
- ÿ Change Management
- ÿ Work Process Gate Reviews
- ÿ Routine Client Surveys to ensure alignment