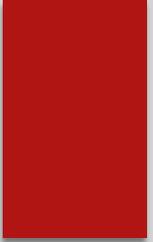


# Risky Business



THE CHALLENGE OF  
RISKY BUSINESS –  
THINKING ABOUT AND  
COMMUNICATING  
RISK IN CONTRACT  
BIDDING AND  
CONTRACT  
PERFORMANCE

[HTTPS://WWW.YOUTU  
BE.COM/WATCH?V=X  
ZBKHDPPRC](https://www.youtube.com/watch?v=XZBKHDPPRC)

How this Came to be



# Acceptance not Conclusive

- ▶ International Contract, fixed price, with large software component – well within contractors wheelhouse but some development and tailoring to specific customer application.
  - ▶ Bad/Vague terms and conditions (competitive) allowed customer to decide when to approve and accept, vs clear objective criteria.
  - ▶ Contract permitted users to “play” with system and break it.
  - ▶ Endless customer issues relating to non-critical software bugs. Some comments out of sequence.
  - ▶ Customer had all leverage since payment tied to acceptance.
- ▶ Bad clauses and acceptance process resulted in customer imposed delays and rework. Massive cost/schedule overruns, risk of default, negative publicity.
- ▶ Post Mortem: “We wanted the job real bad. We knew that the terms and conditions were unfavorable but thought that our relationship with the customer would trump any problems that arose”. If the contract creates a remedy, the customer may need to pursue it.

# Power Switch

- ▶ International job, within contractor's wheelhouse, good customer relations, but new supplier for a diesel power generator.
  - ▶ Contractor choose smaller company to supply generator vs its normal vendor.
  - ▶ 60 page source selection document showing why smaller company was picked.
  - ▶ Company subcontracted large portions of manufacturing and imperfectly flowed down terms and conditions, warranty, etc.
  - ▶ Sub was not transparent about manufacturing problems.
- ▶ Consequence: Generators did not meet spec. All failed or showed signs of failing, water intrusion, rust. Prime had to replace them with new containers at significant cost overrun. Defaults and litigation.
- ▶ Post Mortem: How? Why?

# Monitor your Risk

- ▶ International Air Traffic Project. Company selected new supplier for display monitors. Commercial spec.
- ▶ Less expensive than normal supplier.
- ▶ Company was relatively new, but had experience making computer monitors for different industry.
- ▶ Problem: Fielded monitor were “ghosting” – unexplained images lingered on screen. Tests revealed all 250 monitors needed replacing.
- ▶ Post Mortem: Default, denials, negotiations. Expensive swap out. Contractor “sold back” monitors to company. Repurchased from its normal supplier. Going with unproven supplier turned out to be too risky. PM- we thought we could save some money and develop a new source. We didn’t test – just bought to spec and shipped.

# Systems Dis-integration

- ▶ Systems Integration job involving distributed security system. HW, SW and integration.
- ▶ Contractor had experience in field but this was with new customer, new application, new procurement process.
- ▶ Prime contractor selected small supplier with novel approach and novel hardware/software.
  - ▶ Prime not familiar with how hardware would be used in new market. Gave up control of systems engineering to supplier.
  - ▶ Supplier unable to ramp up quickly and match its approach to the job.
- ▶ Post Mortem: Massive cost overruns, risk of default, bad publicity. Prime forced to take over job. Follow on PM: "I don't understand why we let go of systems engineering."

# What is Risk?

- ▶ **Risk** is the probability of uncertain future events coming into fruition
- ▶ Depending on who you ask, Risk is
- ▶ Uncertainty
- ▶ Something bad
- ▶ Opportunity
- ▶ The intangibility and terminology of risk makes it hard to grasp and agree on.
- ▶ Least popular thing to talk about

# Types of Risk

- ▶ There are many ways to describe risk
  - ▶ Foreseeable vs Unforeseeable
  - ▶ Likely vs remote
  - ▶ Potentially severe vs trivial
- ▶ You can plan for both foreseeable and unforeseeable risk
  - ▶ But less foreseeable risk is much harder to plan for.
- ▶ Risk has variable factors
  - ▶ Low or high probability (or unknown)
  - ▶ Low or high severity

# Is Risk Good or Bad?

- ▶ If you are thinking about risk as good or bad, you are asking the wrong question
- ▶ Risk can result in....



# Is Risk Good or Bad?

- ▶ Risk is neither good nor bad
  - ▶ Risk can lead to loss of value
  - ▶ Risk can lead to growth
- ▶ Businesses use risk to grow.
  - ▶ Bigger contracts
  - ▶ New markets
- ▶ Risk sometimes kills businesses
  - ▶ Bad outcomes sometimes arise from poor risk management.
- ▶ Risk vs. Bad Business Decisions
  - ▶ Many bad business decisions are the result of poor risk management
  - ▶ Eg: Kodak invented the digital camera in 1975
- ▶ Risk vs Uncertainty
  - ▶ Uncertainty is a factor which increases risk
- ▶ Risk vs. Liability
  - ▶ Liability is damage which arises from bad luck or bad risk identification and risk management
  - ▶ Reducing risk will reduce liability

# What is Risk Management?

- ▶ RISK MANAGEMENT INVOLVES IDENTIFYING AND REDUCING UNCERTAINTY IN DECISIONMAKING
  - ▶ involves controlling or planning for the variables as best as we can so we can grow our business.
- ▶ **Goal:** To reduce the foreseeable risk that may have a big impact.
  - ▶ Risk management involves exploring known parameters where things can go wrong and planning for it.
  - ▶ By increasing information, and planning. By increasing price.
- ▶ **Goal:** To identify unforeseeable risk and uncertainty and assess its potential magnitude and likelihood (and what you might do about it)
  - ▶ No bid, Insurance, etc.
- ▶ Risk Management is also deciding which risks to focus on

# Fundamental Challenges of Risk Management

- ▶ Everyone likes growth but nobody likes risk
- ▶ The probability and potential impact of risk is hard to identify.
- ▶ Some risks are hard to identify – things sometimes happen “out of the blue”
- ▶ Some risks can’t be controlled –
  - ▶ But these still have to be briefed and understood
- ▶ Some projects have high risk vs their return
  - ▶ should be no-bids?
- ▶ Controlling or reducing risk costs money
  - ▶ Knowing what you are good at makes some risks more manageable.
  - ▶ Not all mitigations cost a lot
  - ▶ Getting risk bid into price becomes harder the more speculative it is

# Why Engage in Risky Business?

- ▶ Risky Business = opportunity
- ▶ The fastest way for small companies to grow
  - ▶ Enter risky markets with higher margins.
  - ▶ Go after much larger contracts
- ▶ Larger companies preserve and gain market share
  - ▶ Go after new or adjacent markets to accelerate growth.
  - ▶ Size lets them absorb cost penalty of risk
- ▶ We live in a time of unprecedented disruption
  - ▶ It's risky to sit still and not grow!

# Meditations on Risk

- ▶ The less you understand a risk,
  - ▶ the more it is like gambling
- ▶ It may be OK to gamble on purpose
- ▶ It is dumb to gamble unintentionally
  - ▶ Turning a blind eye to risk
  - ▶ Engage in wishful thinking
  - ▶ Overly confident

# Why Contractors Miss Risk

- ▶ Underestimate Risk of New Market Entry?
  - ▶ Think their core competency travels better than it really does
- ▶ Overconfidence – relying on assumptions not in your control
- ▶ Burying head in sand - Believing that risk is too speculative to worry about
- ▶ Too much wishful thinking – understating likelihood
- ▶ Overlooking risk – not actively brainstorming it.
- ▶ Risk priced individually – combinations of risk not considered. Lack of understanding significance of risk
- ▶ Risk not briefed comprehensively, standardly
- ▶ Lack of agreement on potential or severity.

# Why Contractors Miss Risk

- ▶ Business development managers are not rewarded for highlighting risk.
- ▶ No budget for risk management.
- ▶ Program managers don't know how to brief risk or are afraid to brief it.
- ▶ Contract terms discussion not connected to risk management
- ▶ No one likes "Chicken Little"

# Major Factors Which Increase Risk

- ▶ Never did it before – too many swim lanes over
- ▶ Foreign jurisdiction/ site of performance
- ▶ New developmental work
- ▶ Novel application of familiar technology
- ▶ New or different suppliers?
- ▶ Novel technological application
- ▶ New design/new hardware
- ▶ New software development
- ▶ Significant increase in production
- ▶ New Customer
- ▶ New Market

# Different Perspectives and Roles

- ▶ Senior Management: Realistic understanding and risk management. Willingness to turn down bad deals
  - ▶ sees risk through the lens of the past – were we successful? Have we been sued, defaulted, run up big bills fixing problems?
- ▶ Finance people see risk as price and profit/loss
  - ▶ Their role is to highlight risk relating to price
- ▶ Contracts and Legal people think of risk as measured by “terms and conditions”
  - ▶ Role is to make sure contract mitigates risk
- ▶ Program Managers:
  - ▶ Identification, planning, budgeting
  - ▶ have broader vision of risk but tend to rely on technical competence.
  - ▶ Role is to see risk broadly and price in planning.
- ▶ BD: Customer and project intel
- ▶ All of the above parties suffer from “imperfect vision” – because they don’t discuss risk.

# Risk Allocation vs Risk Management

- ▶ Contracts function has a risk allocation role

	Contact Risk Allocation Tools	
<b>Limitation of Liability Clause</b>	Performance Bond	<b>Indemnities</b>
<b>Acceptance Criteria</b>	LD Clause	<b>Governing Law</b>
<b>Payment Guarantee</b>	Right to withhold payment	<b>Clarity of Scope</b>
<b>Hold Harmless Clauses</b>	Default Clause	<b>Changes</b>
<b>Arbitration Clause</b>	Contract Type - FFP	<b>Delay of Work</b>
<b>Force Majeure Clause</b>	Warranties	<b>T 4 C</b>

# Common Issues with Briefing Risk\*

- ▶ No-one likes Chicken Little - If you are constantly briefing on low probability, speculative risk, they start looking at you funny
- ▶ Risk is downplayed in briefings to management on project bids and proposals
- ▶ Most project briefings (ie; the gate process) don't explain risk in a simple and clear way which highlights practical steps to address it.
- ▶ Most RFPs do not address risk in any real way
  - ▶ DOD addresses risk through proposal eval, past performance, cost realism. The Acquisition risk management guide is all after award.
  - ▶ Customers address risks with onerous terms
- ▶ \*closely tied to why contractors miss risk

# Risk Mitigation Deserves its Own Spotlight

- ▶ A Real Risk briefing which gets the whole team on the same page and aligned to the same goals.
  - ▶ Can be presented to management in 30 minutes or less, which summarizes the actual known factors which may create program risk for the particular program
- ▶ A powerpoint, showing areas of disciplinary risk, which is explained and graded by disciplinary leaders
- ▶ Each slide depicts an area or category of potential risk – and grades the risk by likelihood and impact.
  - ▶ Recommends mitigation and cost
- ▶ The risk areas may be tailored by program – One size wont fit all projects and/or industries. You can predict and possibly plan for risk.
- ▶ Can only do when entering new, risky markets – or whenever

Risk Category	Examples	Unfactored Cost	Factored Risk	Handling Approach
System Acceptance	New customer, limited definition of sell off	600M	200M	Define acceptance approach in proposal
Supplier Oversight	Subcontractor ability to provide resources and complete tasking	1m (6M scope)	300K	Early engagement with supplier
In Country Surveillance/Support	Oversight of supplier, customer interface, in country labor	1M	300K	Regular customer meetings/build rapport
Customer Furnished Site	Site provided on time, in condition necessary for scheduled work	1M	200K	Monitor status

# Risk of Price overruns

- ▶ Are we able to bid enough margin to cover unexpected risks arising in any of the other areas?
  - ▶ The answer is almost always “no”
- ▶ Is payment secure? How do we make sure we get paid?
- ▶ Is the contract type the right type for the work?
- ▶ Is there any complexity that would drive up cost risk on the program vs prior projects?

# Risk of the technical solution

- ▶ Has an identical or substantially similar system been sold before without issue?
- ▶ How much development is there?
- ▶ Do we understand the systems engineering challenges?
- ▶ Are there new or different requirements or environmental challenges?

# Risk of non-payment

- ▶ Is payment secure? Do we have a payment letter of credit?
  - ▶ If not, does the customer have any record of non-payment?
- ▶ Does the contract permit payment withholding for any reason?
- ▶ What happens if payment is delayed?

# Comfort with Team

- ▶ Has the program leader and support/execution led this type of effort before?
  - ▶ Do they know the technology we are bidding?
  - ▶ Are they familiar with doing work in the performance location?
- ▶ Do you have enough, trained, qualified personnel to perform the work?
- ▶ If you suddenly lost the top 3 key members of the team, what effect would that have on your performance?

# Risk of non-acceptance

- ▶ Questions:
  - ▶ Are the test and acceptance criteria clean and clear?
  - ▶ Are we able to get Customer sign off or get paid without additional approvals?
  - ▶ Any approval requirements which are beyond our control?
  - ▶ Is payment tied to acceptance?
  - ▶ Is sell off clear?
- ▶ Another trap that I coach my teams to avoid is *the how trap*. Criteria should state intent, but not a solution. (e.g., “User can approve or reject an invoice” rather than “User can click a checkbox to approve an invoice”). The criteria should be independent of the implementation, and discuss WHAT to expect, and not HOW to implement the functionality.  
<https://www.leadingagile.com/2014/09/acceptance-criteria/>

# Schedule Risk

- ▶ How confident are we in the schedule considering the work, suppliers and logistics in the performance location?
- ▶ What role could environmental or regulatory issues play?
- ▶ What role could transportation logistics play?
- ▶ What role could labor availability play?

# Comfort with Default risk

- ▶ Is there an enforceable Limitation of Liability at a reasonable limit which has been reviewed by counsel in the country? What liability does the LoL limit?
- ▶ Are consequential damages waived or capped by the LoL?
- ▶ Where will litigation or arbitration occur and is it enforceable?
- ▶ How litigious is the Customer?
- ▶ How favorable are our contract terms?
- ▶ What are the most concerning contract terms?

# Comfort with Suppliers

- ▶ Is it a new supplier?
- ▶ Are we confident that supplier can handle the work?
- ▶ How well do we understand what we are buying?
- ▶ Do you have rigorous supplier source selections?
- ▶ Do we have strong subcontract terms and conditions?
- ▶ Are the terms flowed down to lower tier subs?
- ▶ Do our key suppliers have financial strength?
- ▶ Do we have long term relationships with all key suppliers?

# Comfort with Partners

- ▶ Do we have JV partners or major subcontract teammates?
- ▶ Are our partners strong?
- ▶ Do both parties have same vision?
- ▶ How will we deal with impasse?
- ▶ Is the work responsibility clearly divided?
- ▶ What is our track record of working with these partners?

# Comfort with Customer

- ▶ Do we have a history with the Customer? Have we had any negative past experiences?
- ▶ How does this customer behave in disputes – Do we have evidence that they are more likely to try and work things out or go to court?
- ▶ What is our recent contractual experience with this Customer?
- ▶ Do we have deep long term relationships with the Customer?
  - ▶ How stable is the customer organization and could it be shaken up by transfers or retirements?
- ▶ Is the Customer bureaucratic so that it is difficult to get them to sign documents, provide answers or work with us when issues arise?

# Comfort with the Ethical Environment

- ▶ Is the country of performance ethically challenged?
- ▶ Have all parties been vetted through the DD process?
- ▶ Are there any extant FCPA concerns?
- ▶ Do we work with an agent?
- ▶ Where in the program might the main ethics/anticorruption risks occur?

# Comfort with the Physical Environment

- ▶ How difficult is it to get goods shipped into the country?
- ▶ How difficult is it to move goods around the country?
- ▶ Are the site conditions known? Challenging?
- ▶ Is the geography challenging?
- ▶ Is your team fly in/fly out or stationed in country?

# Comfort with the regulatory environment

- ▶ How are taxes calculated?
- ▶ What registration or licensing requirements are there?
- ▶ If international, how do we obtain a legal presence in the country?
- ▶ How do we obtain work permits?
- ▶ Regulatory environment in country – including laws and taxes

# Comfort with Export/Import Process

- ▶ Do we have all export and import licenses necessary to perform the work?
- ▶ What foreign parties will have to be included in licensing?

# Comfort with Prime/Sub Terms Alignment

- ▶ Are the subcontract terms back to back with your prime contract or different? Why?
- ▶ What gaps are there and how might they increase risk?

# Comfort with Offset performance

- ▶ Can we meet the obligations in the country?
- ▶ Are we confident that offset projects can be accomplished under existing rules?
- ▶ Have we included reasonably estimable offset costs in the contract?
- ▶ Is the process for identifying offset projects clear?
- ▶ Are there good, willing, affordable offset partners?
- ▶ Are the technology transfer provisions acceptable?

# Risk Pre-Brief

- ▶ Risk Area 1 – New market – India –
  - ▶ We are entering a new market and have identified the following potential risks...(insert narrative)
  - ▶ Potential impact: ??
  - ▶ Mitigation strategy:
- ▶ Risk Area 2 – New Customer.
  - ▶ This is a new Customer for the business. Research shows that the customer does not have a history of disputes with contractors. However, the head of the customer agency is new and has little track record.
  - ▶ Potential Impact: Large if not managed. We have put xx\$ in risk into our bid, and will hire local customer relations manager to meet regularly and build relationships. Will brief quarterly.
  - ▶ Customer has the following control levers – Can withhold payment in event of dispute, Can delay acceptance over system at x, y and z points. If this happens we will ...
- ▶ Risk Area 3 – Poor terms and Conditions
  - ▶ We are unable to include a Limitation of Liability which would otherwise shift some new market risk. We will negotiate better acceptance terms but...
- ▶ Risk Area 4 - ....
- ▶ Walk away – Our walk away position (too much uncontrolled risk) happens if we cannot hold price to x, and obtain clear sell off criteria.

	Comment	Likelihood	Impact	Rating
Confidence in the Deal	IDIQ drags down rating, Profit margins drag down rating	B-		
Confidence with our Tech Solution	Good but new design – tough standards	B		
Confidence with Sell off Criteria	Likely good	A-		
Confidence with Price	Price very low	C-		
Confidence in Team	Significant increases needed	C		
Comfort with Customer	New Customer – but customer wants to look good as well	B		
Confidence with Supply Chain	Unknown – but civilian delays occurring. How will SC react to low pricing?	C		
Comfort with Schedule	Will IDIQ wreak havoc on overhead demands?			

# Case Study: Sig Sauer MHS Contract

- ▶ Company wins \$580M DoD contract to supply new Army handgun and accessories (Modular Handgun System).
  - ▶ Unseated incumbent Berretta, beat Glock

# Potential Risks

- ▶ Growth: Largest award in company history
- ▶ Price: Internet reports that SS bid \$207.00 per handgun, vs ~\$550 street price.
- ▶ New Design: Modular fire control unit – never been done before.
  - ▶ Should make it easier to achieve specs, lower vendor pricing, and provide service.
  - ▶ Was there enough testing?
- ▶ Workforce: Will they be able to fill labor demands in rural Exeter NH?
- ▶ Do they have enough reliability data to support warranty terms?
- ▶ Manufacturing: Do they have enough plant and machinery to meet demands?
- ▶ What strain will the IDIQ format put on the company?
- ▶ Suppliers: Can suppliers keep up with new demands?

# Additional info

- ▶ With the contract and other growth opportunities comes the need to fill more than 100 jobs, according to Tom Taylor, the company's chief marketing officer and executive vice president, commercial sales.
- ▶ "There's a continuing flow of opportunities here," said Taylor, who cited a need for machinists, assemblers, range testers and shipping and receiving personnel. "It's really important to let people know there are jobs here."
- ▶ The manufacture of the Army's weapon is being done in a secured area of the assembly and production departments, per the military's requirements, said Taylor. Sig also adopted what Taylor described as "more efficient machining" in the making of the gun. Its production machinery underwent some refinements to enhance production, according to Taylor.
- ▶ Taylor said the company has reached out to state policymakers and education officials in their pursuit of the skilled personnel it needs to fill jobs at the plant. In addition, Taylor said Sig Sauer has "taken matters into its own hands" to create an in-house education/training center to help identify qualified workers.

# Post Award Developments

- ▶ Protest - (denied)
- ▶ Critical DoD IG report
- ▶ Test failures ball ammo not meeting mtbf/mtbs
- ▶ Drop test issues

