Towards Ethical Practice

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A reasonable goal

- We will never be perfect, but…
- We can think about what it means to behave ethically
- We can commit to acting ethically
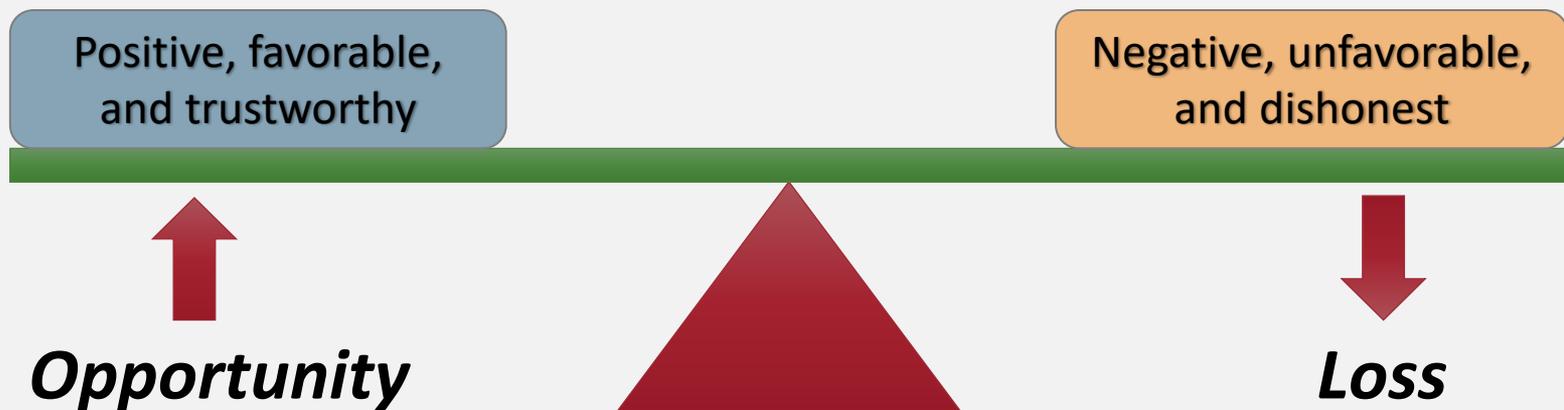- Committing now makes it easier to choose ethical option later

ETHICSOMETER

Positive, favorable, and trustworthy

Negative, unfavorable, and dishonest

Opportunity

Loss

Table 1. Ethical theories used to conduct the ethical analysis

School of Ethics	Ethical Principle	Definition
Deontological Theory (Non-consequential)	End/Mean Test	Not treating an action as a mean to an end but rather as an end by itself.
	People's Perception	An action is unethical if the decision maker is uncomfortable if their actions were presented on the front page of a newspaper.
	The Golden Rule	Do unto others as you would have others do unto you
Teleological Theory (Consequential)	Egoism Theory	An action is ethical if it promotes an individual's self-interest.
	Utilitarianism Theory	An action is ethical if the good for the highest number of stakeholders is greater than the damages

Ethics: a practical perspective

Ethics involves doing the right thing even when it costs more than you want to pay. It is what we should do.

When we think of <u>unethical</u> behavior…

Lying

Fraud

Bid rigging

Conflict of interest

Sexual harassment

Discrimination

Bribery

Ignoring public safety

SAFETY MOMENT: UNSAFE ACTS

Instead of looking for "things" to blame after an accident occurs, prevent accidents from happening by avoiding the following:

- Taking shortcuts

- Being over-confident

- Starting a task with incomplete instructions

- Poor housekeeping

- Ignoring safety procedures

- Mental distractions from work

- Failure to pre-plan the work

UNSAFE ACTS cause

4 TIMES

as many accidents and injuries as **UNSAFE CONDITIONS**

When we think of <u>ethical</u> behavior…

Professional

Reports wrongdoing

Fair, Objective

Honest

Focused on safety

Self-aware

Most people behave ethically

- Studies emphasize the prevalence of unethical behavior, showing <u>some</u> people make bad choices

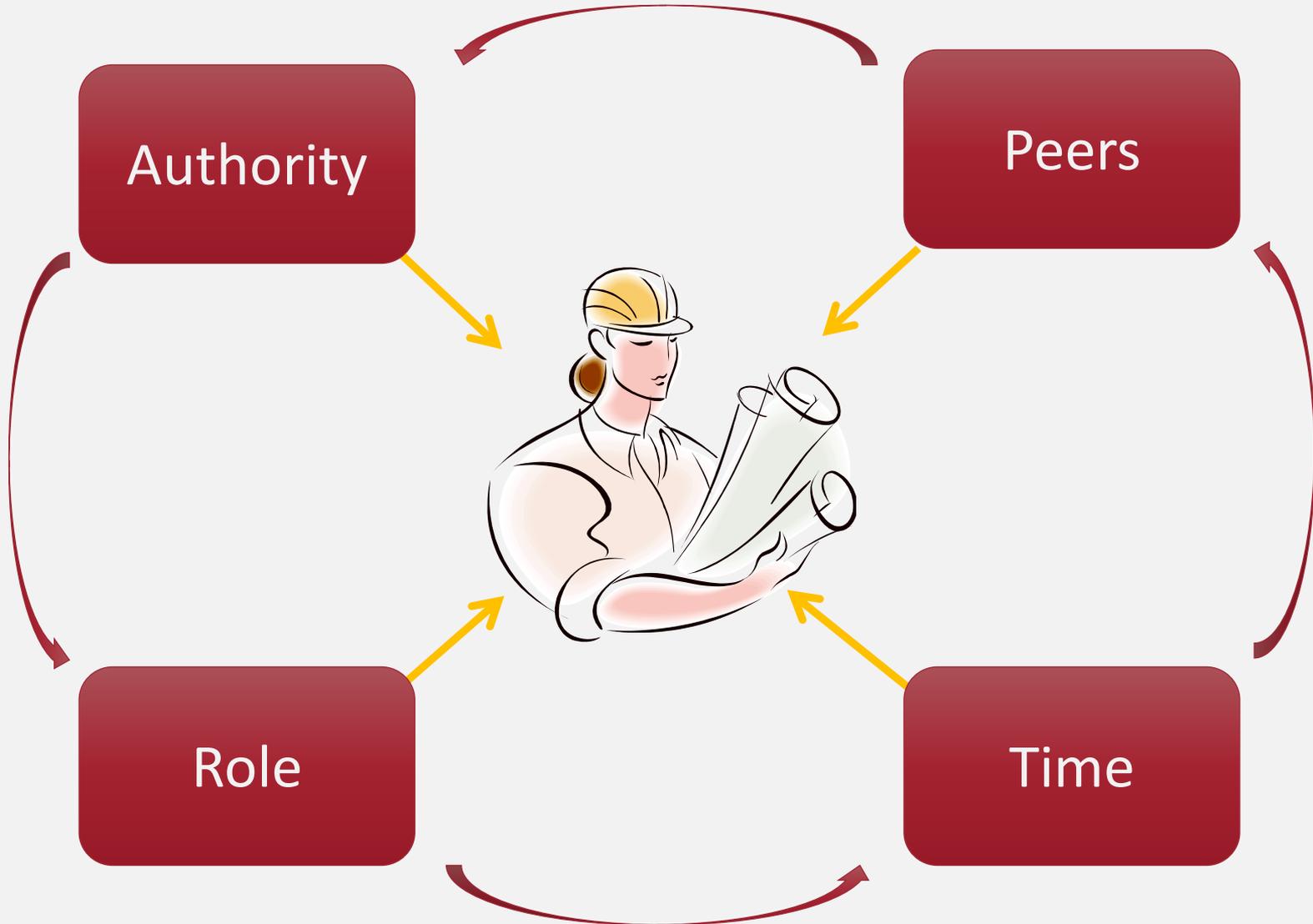- Buried in research is the fact that **the majority of people behave ethically**

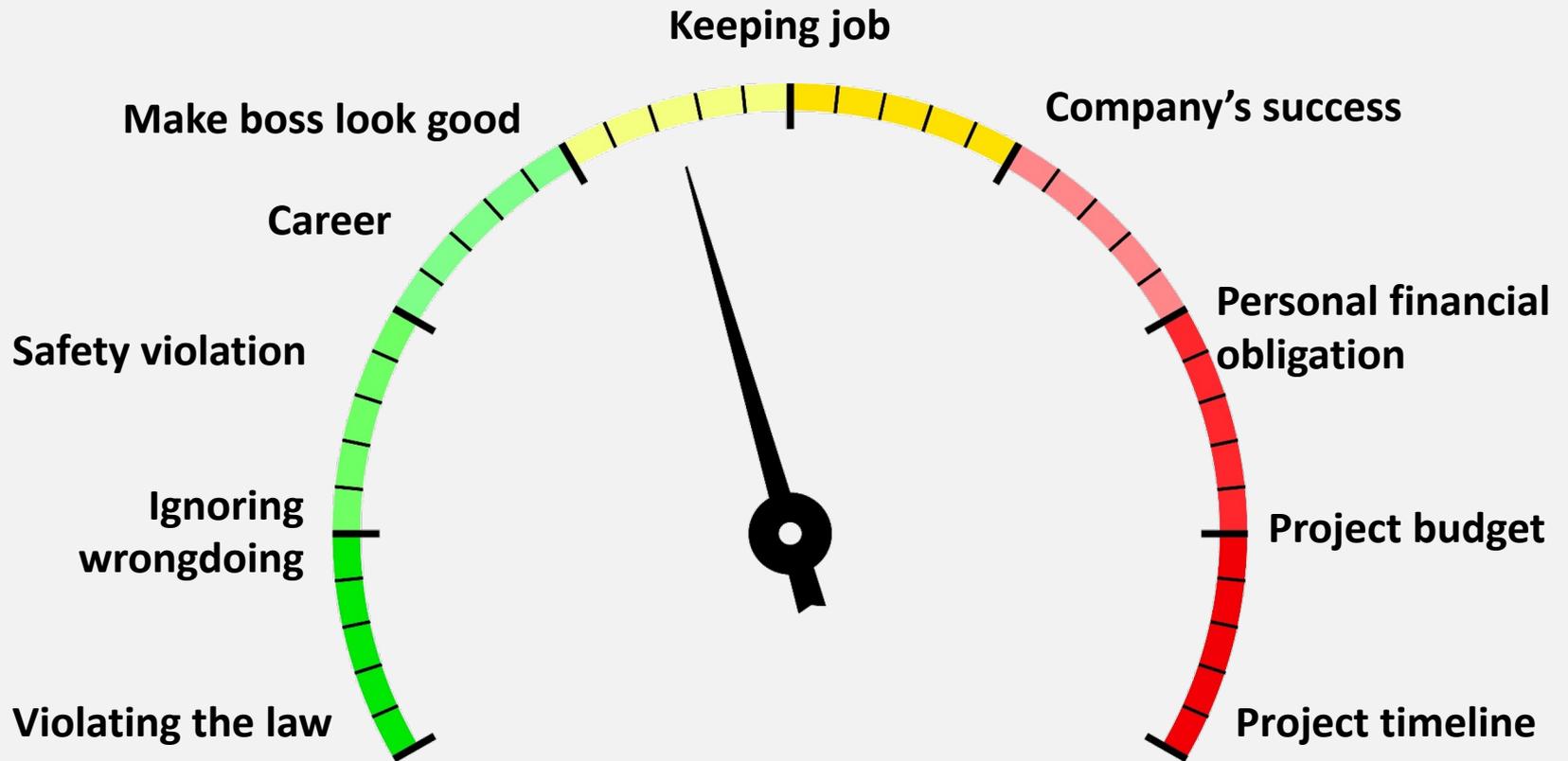# Why do people make unethical decisions and engage in unethical behaviors?

PRESSURE

Pressures and decision-making

Authority

Peers

Role

Time

Pressures by intensity

Keeping job

Make boss look good

Company's success

Career

Safety violation

Personal financial obligation

Ignoring wrongdoing

Project budget

Violating the law

Project timeline

Source: National Business Ethics Survey of the U.S. Construction Industry: Gauging Industry Practices & Identifying Ethics Challenges. Rep. Ethics Resource Center, 2013. [Online] [18 May 2015] page 14.

Are we reporting what we witness?

Ethical Violation	Rank among OBSERVED violations	Rank among REPORTED violations
Abusive behavior	1	24
Conflict of interest	2	21
Failing to correct health and safety risks	2	10
Wasting, mismanaging, or abusing company resources	4	26
Lying to employees	5	33
Violating OSHA guidelines	5	23
Stealing or theft	5	19
Lying to subcontractors, vendors, or suppliers	8	32
Lying to owners, clients or customers	9	34
Discriminating against employees	9	28
Abusing substances, such as drugs or alcohol, at work	9	21

Practical Realities of a Contract

- Defines rights and obligations of the parties
- Allocates risks
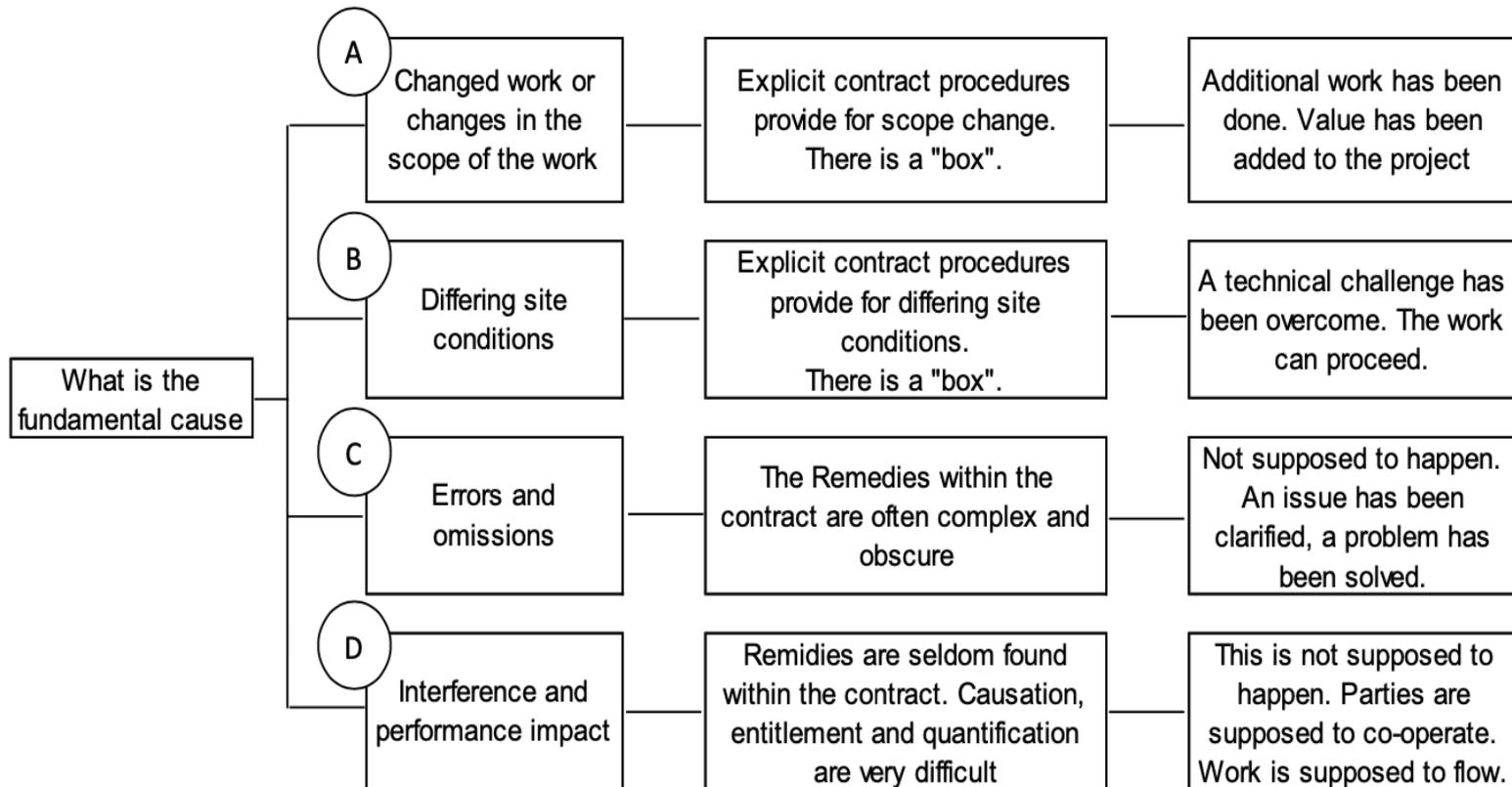- Sets out a number of administrative processes that must be followed

Important Contract Terms

- Scope of work

- Schedule

- Progress Payment and Measurement

- Changes in the work

- Delay and Damages Related to Delay

- Project Records Required

- Compliance with Laws

Project Change

Conceptual Framework for Project Change

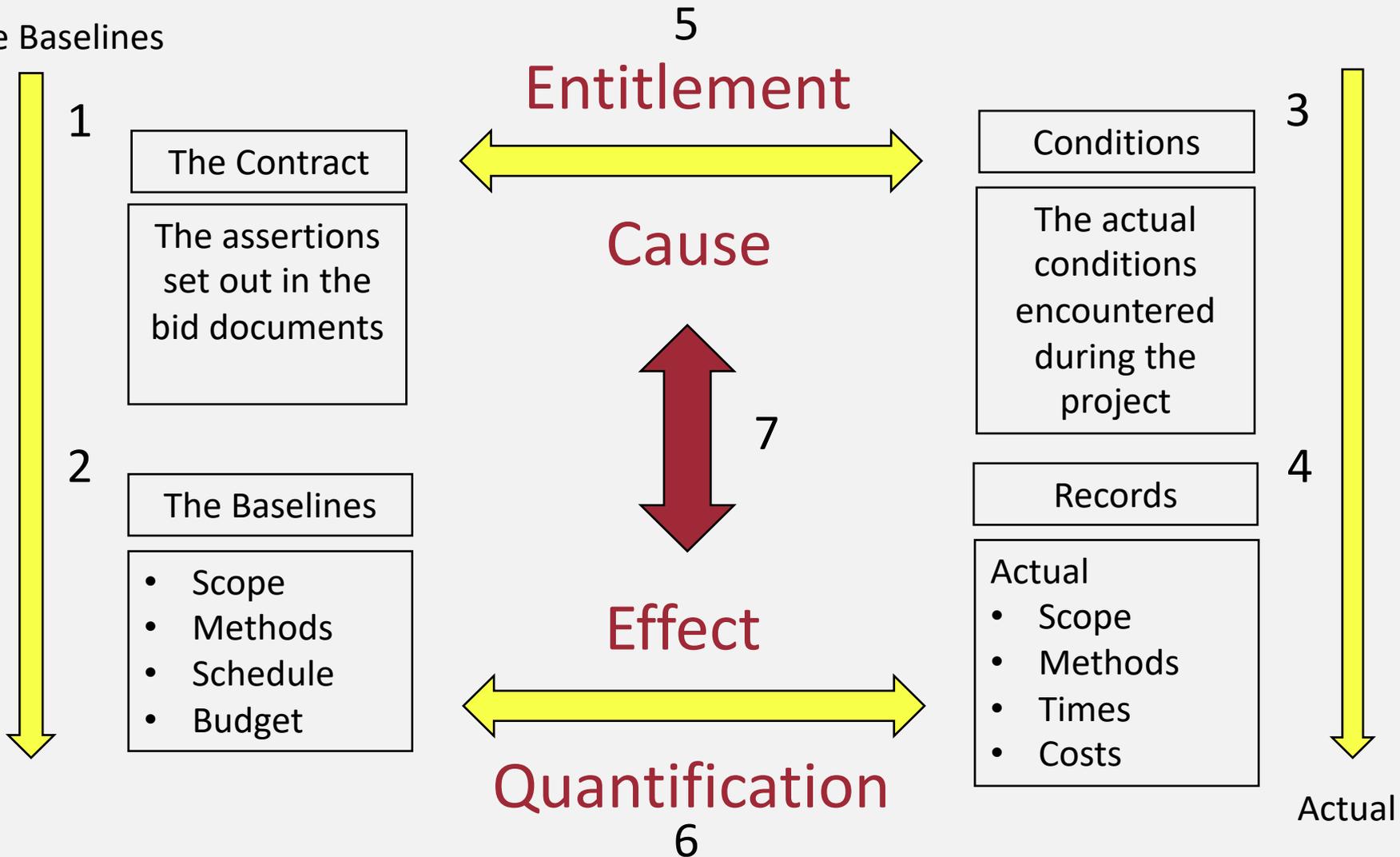|		The job	
		Remains the same. The job remains essentially the same. Changes to the work, such as they are handled within the changes and extension of time clauses. The contractor builds the job they bid.	**Changes and becomes different.** There are substantial changes to the work or the conditions under which it is performed. Change is not be handled by the changes clauses. This is not the job the contractor bid.
The way we build the work	**Remains the same.** The as bid means, methods, and sequence of operations remains largely unchanged. The resource loading, tempo, flow, pace and rhythm of the work remains as envisaged in the bid. The work is built as planned with few if any changes to the operations.	**1.** This is the offer that was made and accepted. The job runs essentially as planned and as represented in the baseline schedule and narrative. Change is relatively minor and is managed using the specified contractual procedures. The contractor gets it done and goes.	**2.** Change is extensive but it comes early and does, at some stage, stop. The differing site condition changes and scope change clauses are tested but they work. Change is defined, quantified and valued; change orders are issued. The schedule analysis process works, extensions of time are granted and time does not become "at large."
	Is forced to become different. There are large and significant changes to the as bid means, methods, and sequence of operations. The resource loading, tempo, flow, pace, and rhythm of the work is changed dramatically from that envisaged at bid time. This is not the way the contractor planned to build the job when they fixed the price.	**3.** Delays, disruptions, unforeseen conditions and the like force a change in the as bid means, methods, and sequence of the work. Change, while relatively minor, impacts the resource loading, tempo, flow, pace, and rhythm of the work. The owner sees the job as relatively unchanged. The contractor sees the job as very changed and impacted. Quantifying impacts to the way the contractor builds the work is extremely difficult.	**4.** Change is extensive, it comes throughout the job and never seems to stop. The resource loading, tempo, flow, pace, and rhythm of the work never settles down. The contractor may be protected by the contract for changes to the job and the owner will likely see the job as changed. Quantifying impacts to the way the contractor builds the work is doubly difficult because it comes on top of the cost of changes to the job.

Problem Management

- Cause (liability)—Effect (damages)

- Recover excess costs and/or time extensions

- Causation

- Entitlement

- Quantification

Managing Conflict

The Baselines

5

Entitlement

1

The Contract

The assertions set out in the bid documents

Cause

7

2

The Baselines

- Scope
- Methods
- Schedule
- Budget

Effect

Quantification

6

3

Conditions

The actual conditions encountered during the project

4

Records

Actual
- Scope
- Methods
- Times
- Costs

Actual

Problem Management

Individuals Involved	Stages in the Claims Process				
	Problem	Disagreement	Dispute	Conflict	Litigation
Litigators					Formal court documentation and proceedings
Consultants & Neutrals				Assist with quantification and entitlement on an issue-by-issue basis	
Sponsors, Standing Advisors & Standing Neutrals			Attempts at resolution removed from day-to-day management		
Project Managers	Routine discussions & negotiations	Substantial honest negotiation on defined problem			
Level of Resolution	← On the Project →			← Removed from the Project →	

Ethics around Change Situations

- Contractor discovers errors and omissions in design documents during the bidding process. What does the contractor do?

- Owner notified of a major error in design documents 24 hours before bids are due. What does the owner do?

- Engineer releases project knowing design is not complete and tells contractors "bid it the way you see it." Is this fair?

- Overstating company work capacity during prequalification process to get more work. Is this ethical?

- Engineer is unresponsive to notification of a change in project conditions. Does this build trust?

- Contractor's entitlement and quantification of changes unfounded and unreasonable. Is this being done in good faith?

- Contractor submits a fraudulent claim and/or basis claim on a mis-representation of the facts. Is this ethical?

Ethics around Change Situations

- Rain event occurs causing the force majeure clause to be used to address delay in construction. Is this a reasonable request?

- Subcontractor does not maintain nor provides access to project records and this complicates auditing of incurred project costs related to project changes. Who is at fault?

- Engineer is paid by owner but delays payment to other parties. Is this legal?

- Engineer observes unethical behavior by owner's representative. Do they report it to the owner recognizing there may be repercussions from representative later?

- Change occurs on the job and Time Impact Evaluation needs to be done. Who pays for this? What is the timing?

- Owner, engineer, or contractor escalates change situation to senior leaders and politicians i.e., goes over the project team. What are the consequences of this?

What can we do about it?

Practical advice for promoting and engaging in ethical behavior

Trust

Trust is:

Choosing to make something you value vulnerable to another person's actions.

Our clients elect to make something they value vulnerable to our actions.

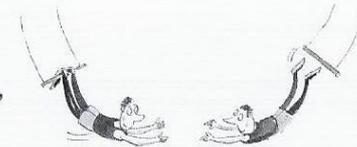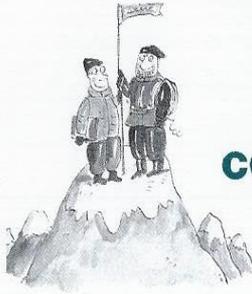We elect to make something we value vulnerable to the owner's actions.
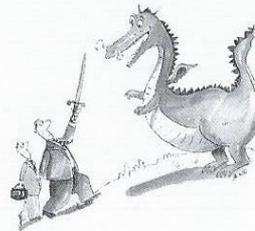
Trust

The 4 Distinctions of Trust:

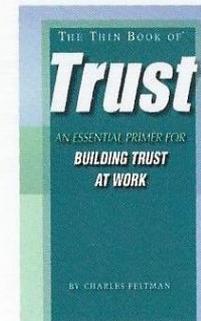**SINCERITY** – *"I mean what I say, say what I mean, and act accordingly."*

RELIABILITY – *"You can count on me to deliver what I promise!"*

COMPETENCE – *"I know I can do this. I don't know if I can do that."*

CARE – *"We're in this together."*

TO ORDER
The Thin Book of Trust
www.thinbook.com

Feltman.

Trust

		Trust based on competence is:	
		Low	High
Trust based on character is:	High	**2** Many meetings. Many verbal agreements and lots of "understanding". Lots of compromise, negotiation and trading. Sympathy that seldom leads to resolution.	**1** A focus on looking for and leveraging strengths. Positive communication. Mistakes seen as learning opportunities. Transparent relationships. Inspiring and creative work.
	Low	**4** Hot, angry confrontations or cold bitter withdrawal. Defensive posturing. Labeling others as enemies. Guarded communication. Letter wars. Mistakes used as weapons. An obsession with protection. Nothing gets resolved.	**3** Work must be defendable against aggressive review. Policies and procedures must be followed to the letter. Method wars. Little real communication. Many "cordial" meetings. Little progress. It is a war of attrition.

There is no direct route from 4 to 1.

Trust

40% Trust dividend. (world class)

- **High collaboration and partnering**

- **Effortless communication**

- **Positive relationships**

- **Aligned systems and structures**

- **Strong innovation, confidence and loyalty**

40% Trust tax. (low trust)

- **Common "CYA" behavior**

- **Hidden agendas**

- **Political camps with allies and enemies**

- **Many dissatisfied employees**

- **Bureaucracy and redundancy in systems and structures**
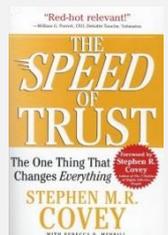
Strategy X Execution X Trust = Results.

Leadership and Ethical Behavior

Model ethical behavior

Communicate value of ethical behavior

Reward ethical (and punish unethical) behavior

Include ethical consequences in decision-making

Shape organizational culture around ideals, beliefs, and values
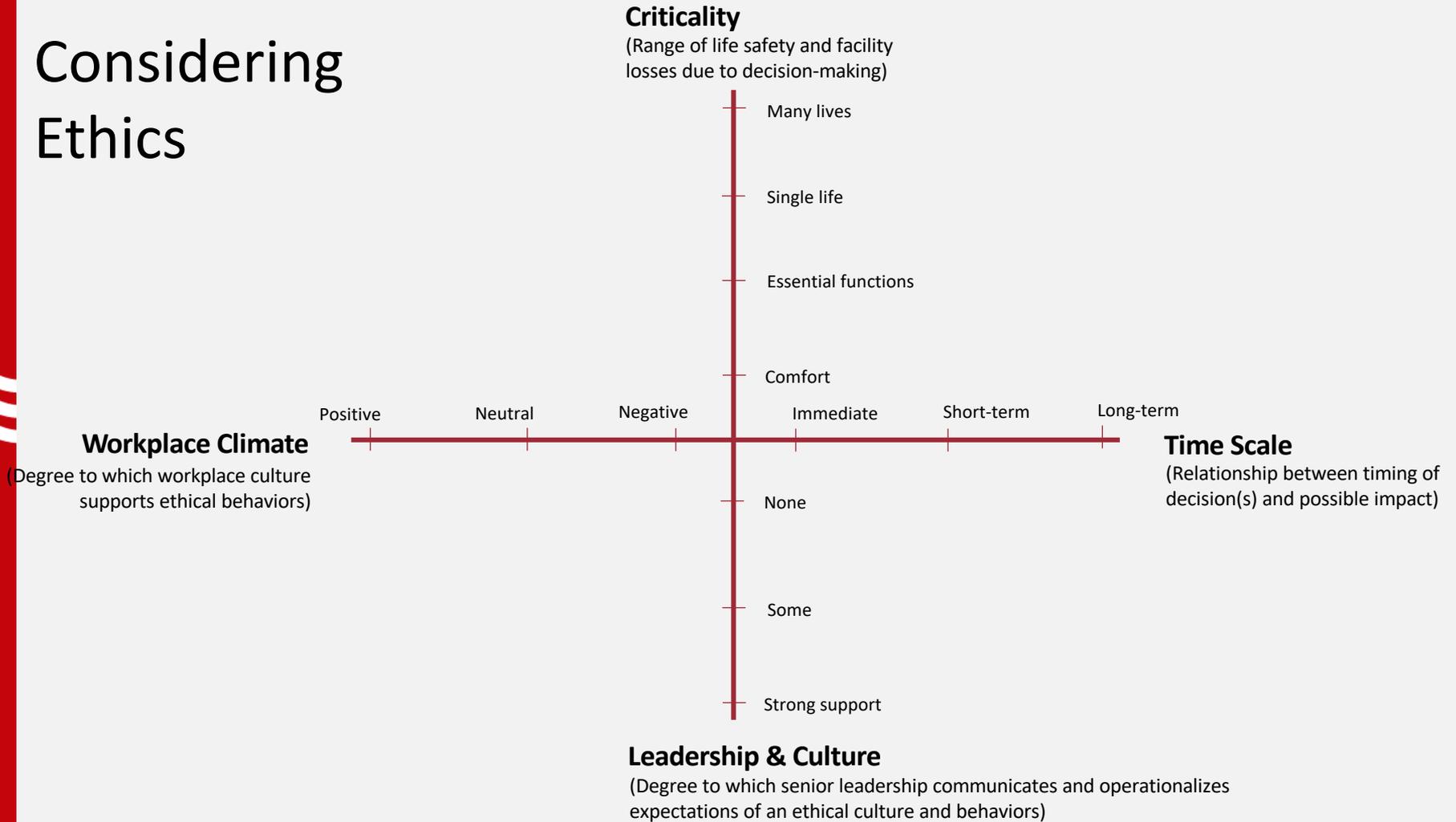
Integrity strategy vs. compliance model

*"With the integrity strategy... **Ethical values shape the search for opportunities, the design of organizational systems, and the decision-making process used by individuals and groups.** They provide a common frame of reference and serve as a unifying force..."*

	COMPLIANCE	INTEGRITY
Ethos	Conform to externally imposed rules	Self govern according to chosen standards
Objective	Avoid criminal charges	Enable responsible conduct
Leadership	Lawyer-driven	Management-driven
Behavior	Autonomous beings guided by material self-interest	Social beings guided by values, ideals, peers, and self-interest
Standards	Laws and regulations	Company values, aspirations, social obligations

Managing for Organizational Integrity Lynn S. Paine, https://hbr.org/1994/03/managing-for-organizational-integrity

Considering Ethics

Criticality
(Range of life safety and facility losses due to decision-making)

Many lives

Single life

Essential functions

Comfort

| Positive | Neutral | Negative | | Immediate | Short-term | Long-term |

Workplace Climate
(Degree to which workplace culture supports ethical behaviors)

Time Scale
(Relationship between timing of decision(s) and possible impact)

None

Some

Strong support

Leadership & Culture
(Degree to which senior leadership communicates and operationalizes expectations of an ethical culture and behaviors)

Questions to Ponder

- Who's standard of care?
- What is the problem? How do we solve the problem? Are people part of the problem?
- Are ethics an absolute?
- Are all situations equal ie, low value/low impact versus high value/high impact?
- How do accepted business practices and normal risk taking connect to ethical practice?
- The nature of disputes **grow** from a problem to litigation and the people involved go from being the sheriffs to gunslingers! In addition, contractual problems flow from a combination of project uncertainty and, at times, the limited ability of people to think and communicate.

Questions to ask ourselves

Is it right?

Is it fair?

Am I hurting anyone?

Could I disclose this to public or mentor?

Would I tell a family member to do this?
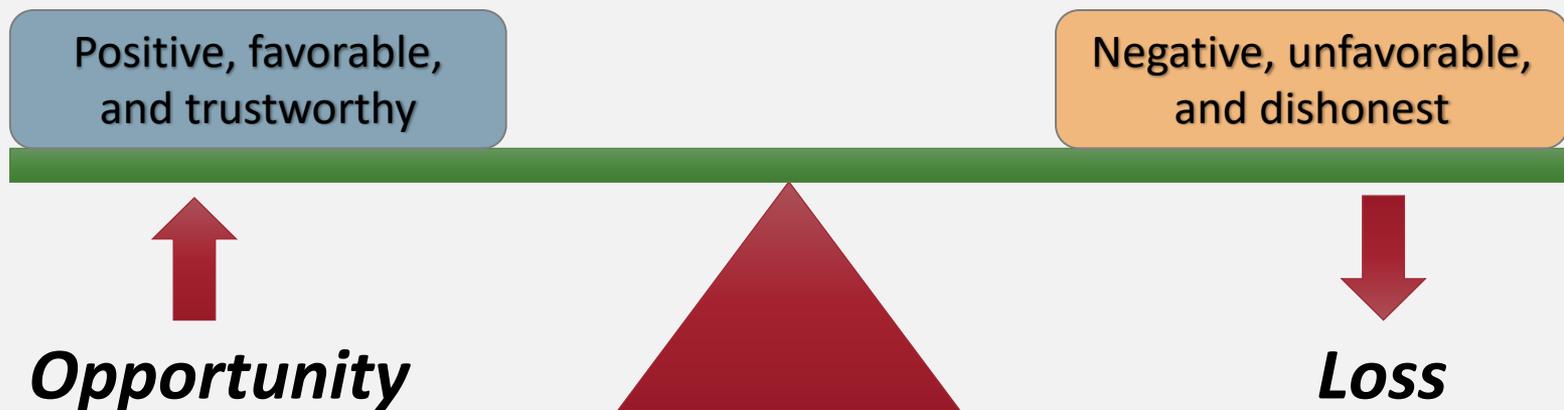
Does it pass the stink test?

Source: Nash, L. (1981), "Ethics without the Sermon", *Harvard Business Review, 59*, pp. 79-90.
Available online at: https://hbr.org/1981/11/ethics-without-the-sermon

A reasonable goal

- We'll never be perfect.
- But we can think about what it means to behave ethically.
- And we can commit to acting ethically.
- Making this commitment ahead of time makes it easier to make the right choice.

Positive, favorable, and trustworthy		Negative, unfavorable, and dishonest

Opportunity   ***Loss***

Questions & Comments?
Thank you!

Contact me:

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Other Ethical Dilemmas to Consider

- Overstating company work capacity during prequalification process to get more work. Is this ethical?

- Contractor A did not win the contract but observes work shortcoming of the contractor that did. Should this be reported to the owner?

- Contractor observes unethical behavior by owner's representative. Do they report it to the owner recognizing there may be repercussions from representative later?

- Contractor knowingly performs substandard work on what they feel is an insignificant item (could be over designed in their view) in the hopes they do not get caught and pass inspection. Is this right?

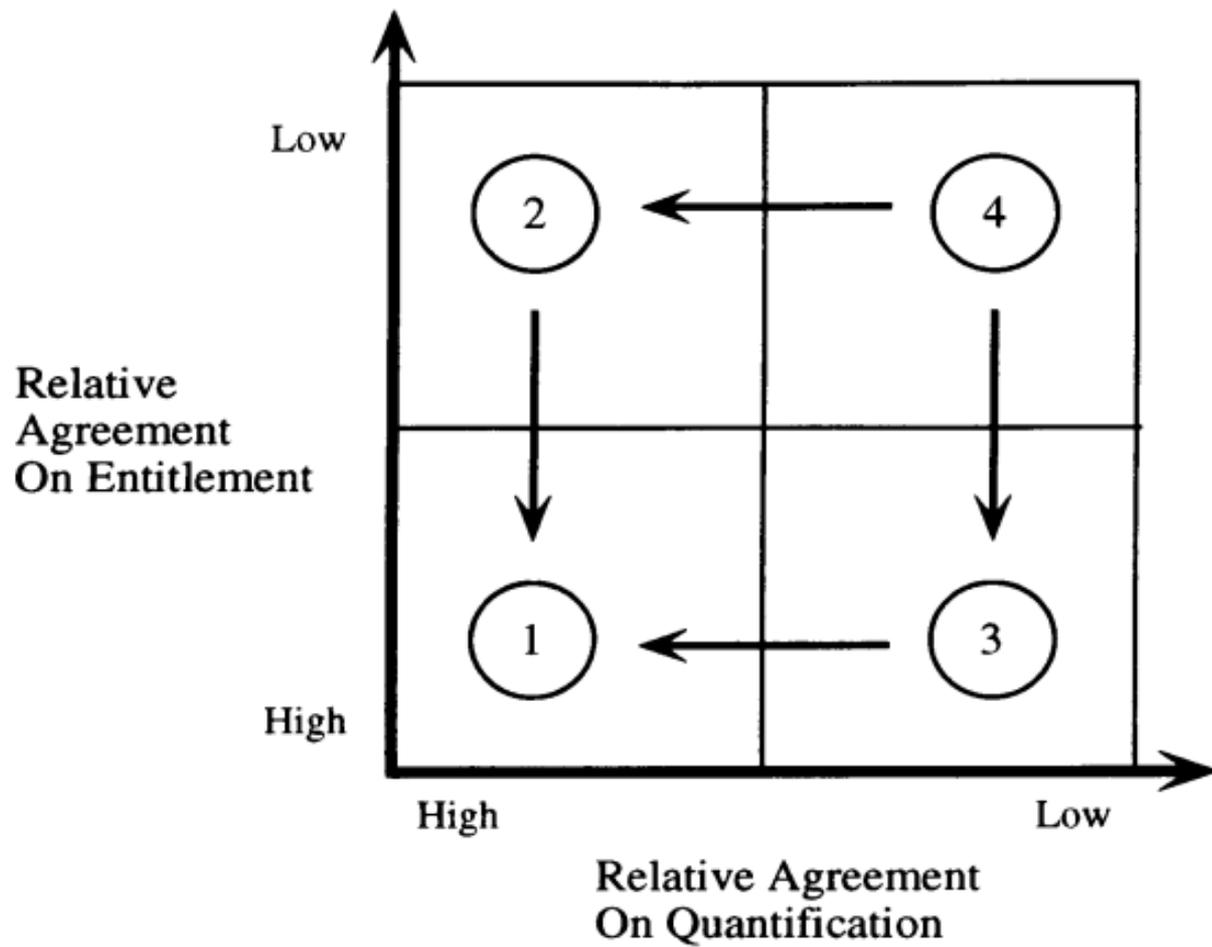# Other Ethical Dilemmas to Consider

- Front loading by bidding higher prices for work that is done early in the project with lower prices for items performed later to achieve a positive cash flow for the project. Another way to say this is not bidding the true cost of the work. Is this right?

- Submitting higher unit prices on items you believe will increase and lower unit prices for those you believe will decrease. Is it ethical to unbalance your bid?

- Awarding a contract to an unrealistically low bidder. Bonds or no bonds, is this the right thing to do?

- Contractor uses poor environmental practices such as dumping waste, burying hazardous materials, poor erosion control, working in restricted areas) knowing no one will likely notice. Is this right?

- Contractor makes a mistake on the job, does not notify the owner, as they try to solve it themselves until it becomes obvious all parties have to be part of the solution. Is this the right approach?
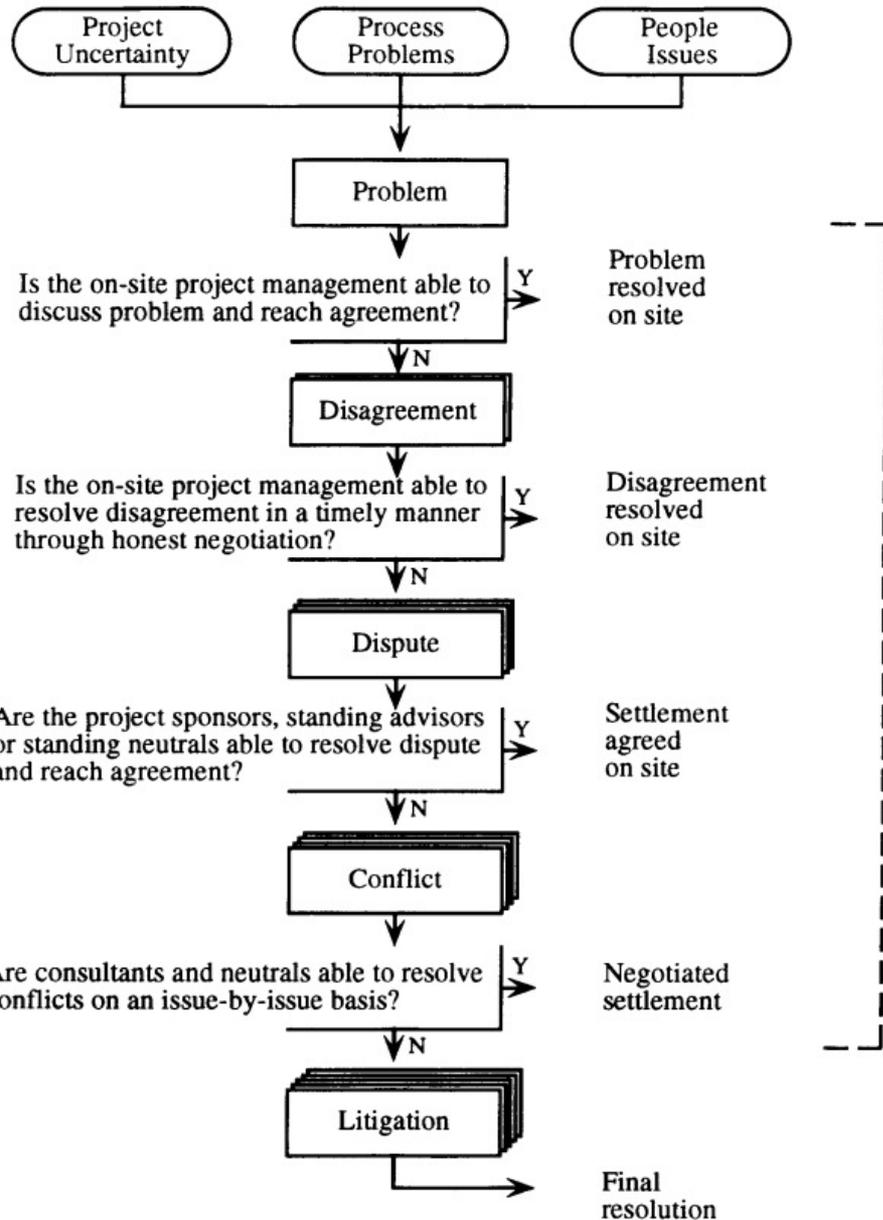
Claims

- A claim is an unresolved request for additional compensation and/or schedule adjustment. Any request for equitable adjustment (time and/or money) becomes a claim when it cannot be resolved at the project level with established procedures in a timely fashion.

- Project uncertainty arises from pre-existing conditions, outside forces and complexity which cause change beyond the expectations of the parties.

- Process problems include within the contracting process such as an imperfect contracts, incomplete scope definition, unrealistic expectations with regard to cost or completion date, and poor performance in executing the work.

- People issues and problems arise between people as a result of poor interpersonal skills, poor communication, lack of responsiveness, and, in some cases, unethical and opportunistic behavior.
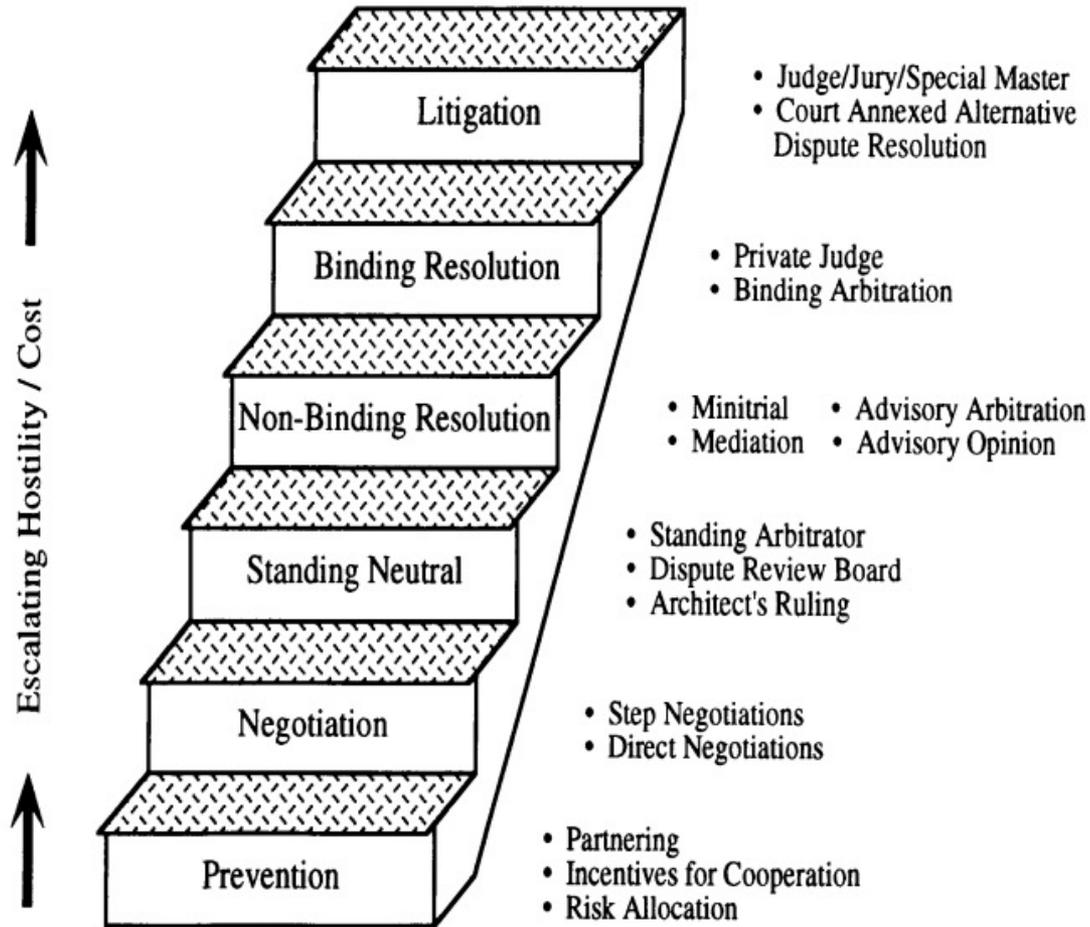
Construction Dispute Resolution Steps

	Disruption	Delay
Entitlement	Entitlement comes from and is constrained by three factors: Entitlement to plan and schedule performance in a series of economical operations. The implied warranty to cooperate and not hinder performance. The requirement that you not make unrealistic assumptions about contract performance.	Entitlement comes back to the notion that ; *"The contractor, in bidding on the contract, bargained for a certain amount of time to complete the project."* This is constrained by the fact that "delay" means delay to the total project duration and that float, if available on other activities is a shared resource.
Causation	Any impacts such as lost labor productivity, extended performance time and resulting delays, if any. must be traced back to one or more of the principal sources of entitlement.	In order to be excusable and compensable, the root cause analysis of the delay must show that the contractor played no part and that the owner played some part.
Principal impact	Loss of productivity, increased resource levels, and extended activity duration which may lead to schedule compression and delay.	Schedule compression in non critical activities. Change of critical path in previously non critical paths. Delay in project completion.
Quantification	Project specific studies such as measured mile analysis, comparative studies or industry studies such as MCAA or NECA factors.	Time impact analysis performed following standard or industry standard protocols. TRO studies for extended indirect costs.

Case Applications

NSPE BER Case 20-04

Public Health, Safety, and Welfare

Drinking Water Quality

NSPE BER Case 20-04: Public Health, Safety, and Welfare –Drinking Water Quality

- Facts: Engineer A, PE, is superintendent and chief engineer for the Water Commission.

- The Commission decided to change its water source from purchasing from another authority to using the local river.

- Engineer B, a consulting PE, is tasked with evaluating water treatment needs for the change.

- Engineer B's report to Engineer A recommends extensive capital investment and a three-year timeline to provide corrosion control to prevent lead leaching in excess of the standards.

NSPE BER Case 20-04: Public Health, Safety, and Welfare –Drinking Water Quality

- **Facts:** The Commission decided to change its water source from purchasing from another authority to using the local river. Consulting Engineer B's report to Engineer A recommends extensive capital investment and a three-year timeline to provide corrosion control to prevent lead leaching in excess of the standards.

- Engineers A and B met with the Commission at a sparsely attended public meeting and recommended delaying the change until the improvements were made.

- The Commission voted to make the change and begin making improvements at the same time.

NSPE BER Case 20-04: Public Health, Safety, and Welfare –Drinking Water Quality

Questions:

    1. What are the ethical obligations of Engineer A and Engineer B?

    2. What should Engineer A and Engineer B do?

NSPE Code of Ethics References

- Section II.1. -Engineers shall hold paramount the public's safety, health, and welfare.

- Section II.1.a. -If engineer's judgment is overruled under circumstances that endanger life or property, notify employer/client and other appropriate authority.

- Section II.1.c. -Engineers shall not reveal facts, data, or information without the prior consent of the client or employer except as authorized by law or this Code.

- Section III.1.b. –Engineers shall advise their clients or employers when they believe a project will not be successful.

Discussion

- Protecting the public health, safety, and welfare is both fundamental to the practice of engineering and the paramount canon of the NSPE Code of Ethics.

- If engineers' judgment is overruled under circumstances that endanger life or property, **they shall notify their employer or client and such other authority** as may be appropriate.

Board of Ethical Review Conclusions

- Both Engineers A and B, together and/or independently, need to clearly communicate to the Commission the public health and safety risk and the likelihood that the project will not be successful.

- Engineers A and B each need to notify the Commission that each has an ethical responsibility to notify "appropriate authorities" –likely regulatory agencies in this case.

- Engineers A and B each need to clearly communicate in writing to appropriate authorities the public health and safety risk.