FASTART sm ACTION PLANNING SESSION

Calgary April 2016

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WARREN COMPANY

Why Are You Here?

- Complex Projects Require Collaborative Teams
  - **Aligned Vision, Value & Performance Expectations**
  - **High Trust to do the right thing for the Project**
  - **Coordinated/Integrated Operations**
  - **Fast Response, Innovation, & Joint Problem Solving**
  - **Turn Breakdowns into Breakthroughs**
  - **Reduce Risk for all Project Members**

Creating Value & Getting Results

Predictability +
Performance +
Productivity ➔ Profit

Daily Schedule

- 8:15 – 8:30 – Arrival / breakfast
- 8:30 – 10:00 – Workshop
- 10:00 – 10:15 – Coffee break
- 10:15 – 12:00 -- Workshop
- 12:00 – 12:30 – Lunch break
- 12:30 – 2:45 – Workshop
- 2:25-3:00 -- Coffee break
- 3:00 – 4:30 – Workshop, Conclusions and wrap-up

Day One
Introductions
Overview of Aligned Project Delivery
Step 1: Value & Risk Analysis
1.1 Mission, Purpose, Strategy,
1.2 Value Proposition
1.3 Value Drivers
1.4 Preliminary Risk Analysis

Step 2: Delivery Team Selection
2.1 Collaborative Leadership
2.2 High Performance Team
2.3 Collaborative Innovation

Step 3: Project Chartering
3.1 Project Leadership
3.2 Common Project Vision & Value Proposition
3.3 Trust & Teamwork
3.4 Operating Principles
3.5 Project Charter

Day Two
Step 4: Target Costing & Innovation
4.1 Holistic Risk Analysis
4.2 Project Scope
4.3 Key Success Factors
4.4 Supply Chain Analysis
4.5 Innovation Priorities
4.6 Target Costing Interaction
4.7 Risk-Reward Framework

Step 5: Operational Planning
5.1 Functional Integration
5.2 Interface Management
5.3 Breakdown Analysis
5.4 Early Warning System
5.5 Responsibilities & Roles
5.6 Fastime Processes
5.7 Protocols & Control
5.8 Resource Allocation
5.9 Supply Chain Integration
5.10 Project Launch Plan
5.11 Risk-Reward Adjustment

Step 6: Governance & Structure
6.1 Project Governance
6.2 Leadership Team
6.3 Relationship Health Mgmt
6.4 Escalation & Issue Resolution
6.5 Communic. Plan
6.6 Commercial & Legal terms
6.7 Alignment of Metrics & Rewards

Self–Introductions

- Name & position
- Company and current role
- Expectations of this session
- Concerns or Opportunities

Project Background

- History
- Players
- What are we going to do?
- What in scope and what out of scope
- Milestone schedule
- Challenges and deadlines

The Problem
The Opportunity
The Path Forward

What EVERY PERSON Working in the O&G Industry should know about Success & Failure

Major Projects

Positive

- No major problems re quality and safety
- Projects running in excess of design capacity
- Hardworking people
- No unskilled or unprofessional conduct
- Proud of industry's achievements

Negative

- We systematically do not deliver on time and on budget.
- No single actor in control of the vision and implementation.
- Projects are delivered by a network of private and public players and stakeholders.
  - Difficult compromise is needed to develop consensus.

Mega Oil Sands Projects

- History of cost overruns and lack of predictability (50 - 100% over-time/budget)
  - **Greater challenges to executives**
  - **Increase risks to investors/clients**
  - **Investors (boss) lose confidence**
  - **Blame each others & Litigation**
  - **Project Manager Attrition (5-7 per project)**

- Typical Cost Overruns:
  - **$1 million/hour (all-in costs)**
  - **Massive Size and interfaces**
  - **Technological complexity**
  - **Enormous Ambiguity & Uncertainty**
  - **Risk Modelling is Horribly Flawed**

Thousands of Complex Interconnected Interfaces Mega Oil Sands Projects

On $2.5 Billion project

Engineering Effort

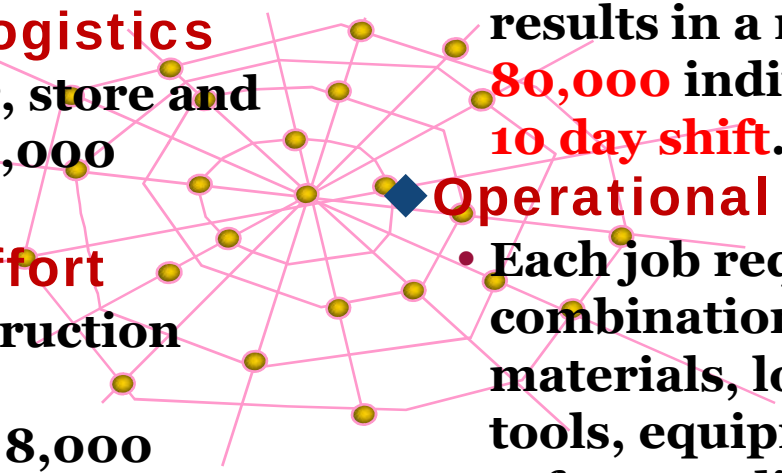
- 3.5 million man-hours
- 40 - 50,000 design drawings
- 10 - 20,000 vendor & shop drawings

Supply Chain Logistics

- Organize, order, store and retrieve 80,000,000 material items

Construction Effort

- 15 million construction hours
- Labour force of 8,000 workers with a turnover of 200%
- Supported by 500 - 800 staff personnel



Management Effort

- Managing a craft mix of 8,000 workers working in pairs doing at least two different activities per day results in a never ending 80,000 individual jobs in a 10 day shift.

Operational Requirements

- Each job requires a combination of the correct, materials, location, access, tools, equipment, scaffold, safety, quality, rigging, consumables, welding, x-ray and many other inputs to allow the worker to get his job done.

This task is the Challenge for Project Directors in the future. How can we solve this?

	Adversarial	Transactional	Collaborative
Key Beliefs	Business is a "Psychological War Game;" Winning comes from Power	Trading, Bargaining, & Differential Views on Value Produces Economic Exchange	Extreme Value is Generated when people work in teams to Push the Envelope on Performance
Behaviors	Argumentative, Money Rules, Use Age, Experience, Position or Budget to get your way, "dog eat dog"	Squeezing & Positioning enables you to get the best result in Negotiations, throw a bone to sweeten the deal.	Co-Creative, Teamwork, Trustworthiness, Highly Ethical & Honest; Maximize what's in the best interests of the whole
Rules of the Game	Pressure others; Winning is a result of Cunning & Craftiness; Hype your importance; Protect your backside; Don't Trust Others or you will get screwed; Everything is Win – Lose.	Take advantage of every opportunity, Exploit weaknesses; Timing is critical; Perception is everything; Trust but verify; Use lawyers to ensure protection; Everything is in the "deal;"	Create value & competitive advantage by using Teamwork (internally) & Alliances (externally). Close integration between operating units, suppliers & Close attention to customers/client; Strive for Win-Win.
Information	Horde Information – It is Power	Contractor responsible for interpretation of information	Share Information to create more new ideas
Trust Level	Distrust , Deception, Aggression, & Manipulation Prevalent	Caveat Emptor (buyer beware)Trust is elusive and unsustainable	Trust is essential to generating a continuous stream of new value

Research Analysis Dr. George Jergeas Senior Professor of Project Management

Typical PROJECT DELIVERY SUCCESS RATES

% chance of being delivered On-Time, On-Budget, On-Target

Schulich School of Engineering University of Calgary

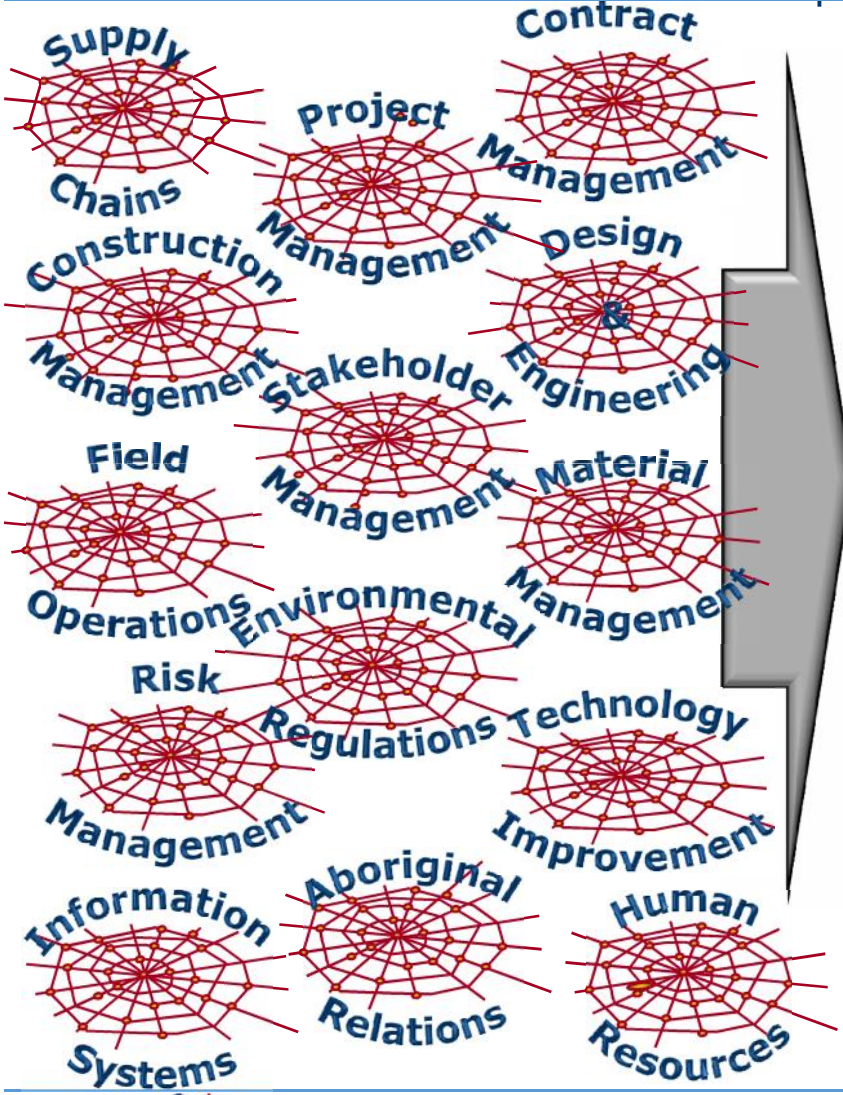
ADVERSARIAL Construction	TRANSACTIONAL Construction	COLLABORATIVE Construction
Based on 90 Construction Projects		
Under 10%	20-30%	80-100%

WHY?

Each Sub-System is an inter-connected set of processes, systems, rules, relationships, traditions, and technologies.

Operating System at the Interface will determine the outcome's pathway.

The Outcome can be either Value Creation, Value Exchange, or Value Destruction on at least 12 dimensions.

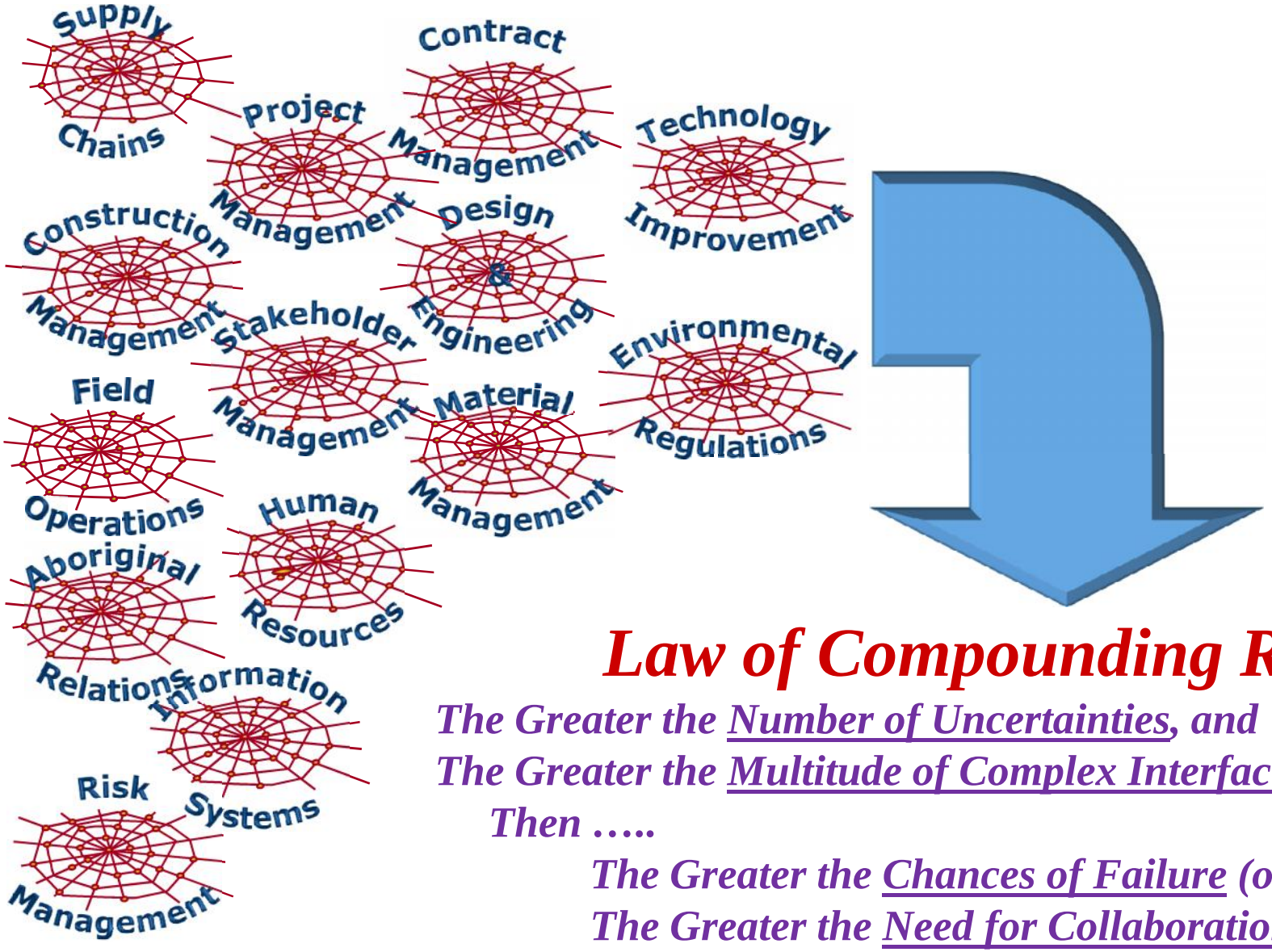


1. Speed of Decision-making
2. Coordination of Effort
3. Human Energy/Enthusiasm
4. Alignment of Goals
5. Collaborative Innovation
6. Litigation & Adjudication
7. Integration & Planning
8. Redundancy & Duplication
9. Productivity & Learning
10. Joint Problem Solving
11. Teamwork & Synchronicity
12. Proactive Initiation or Reactive Repetition

Time & Budget Impact

Complexity Requires Collaboration

Law of Compounding Risks

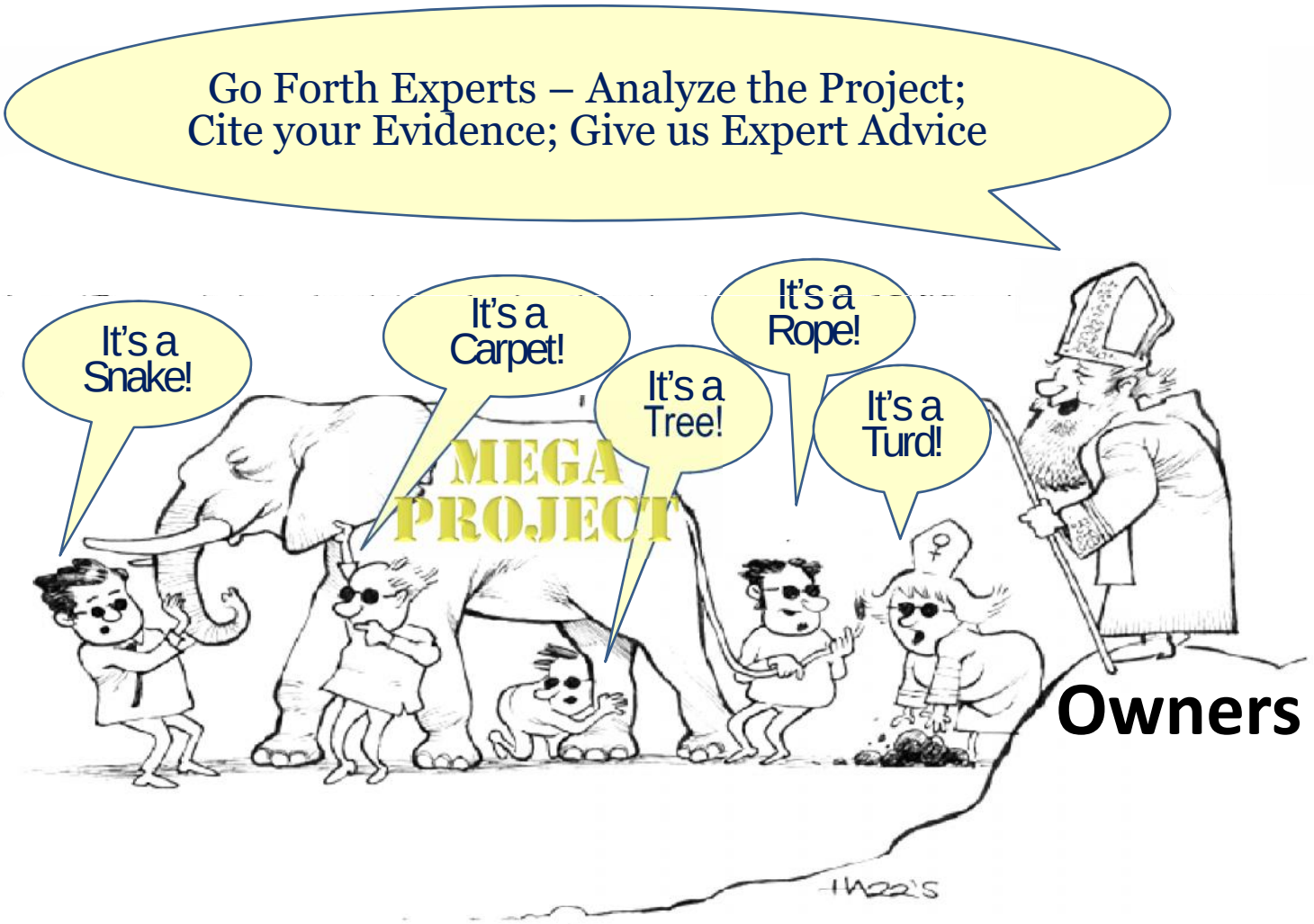


Law of Compounding Risks

The Greater the <u>Number of Uncertainties</u>, and
The Greater the <u>Multitude of Complex Interfaces</u>,
Then …..
The Greater the <u>Chances of Failure</u> (on-time/budget)
The Greater the <u>Need for Collaboration</u>

The Mega Project
Elephant in the Room

The Experts
- Engineers
- Supply Chain
- Project Mgrs
- Contract Mgrs
- Lawyers
- Accountants
- Risk Mgrs
- Contractors
- EPC



AFE/FID Stage Gate Process

Project Development

Planning Deficiencies
- Aggressive Estimating
- Accelerated Scheduling
- Inflated Forecasts
- No Contractor Involvement
- Poor Scope Management
- Lack of Project Integration
- Poor Grasp of Complexity
- Poor Supply Chain Integration
- Poor Human Resource Planning

Transactional Guarded Interaction
- Poor Transfer of Information
- Deceptive Low Bidding
- Poor Contractor Selection
- Distrustful Project Culture
- Treating Contractors as Vendors
- Onerous Legal Agreements
- Myopic Risk Management
- Tactical/Low cost Procurement

Project Delivery

Project Management
- Ineffective Organizational Structure
- Lack of Defined Lines of Authority
- Entanglements of Complexities
- Continuous Change Orders
- Uncontrolled Scope Creep
- Misalignment, Lack of Integration
- Breakdowns at Interfaces
- Supply Chain Breakdowns
- Inadequate Human Resources

Strained Relationships
- Stakeholder Misalignment
- Poor Contractor Performance
- Protective, Risk Averse Behavior
- Distrust, Disputes & Litigation
- Blaming & Avoiding Responsibility
- High Employee Turnover
- Poor Teamwork & No Innovation
- Long Lead Times, Poor Fulfillment

Aligned Project Delivery Model for Building and Sustaining High Performance Project Teams

Step 1 Value & Risk Analysis
- 1.1 Mission, Purpose, Strategy,
- 1.2 Value Proposition
- 1.3 Value Drivers
- 1.4 Preliminary Risk Analysis

Step 2 Delivery Team Selection
- 2.1 Collaborative Leadership
- 2.2 High Performance Team
- 2.3 Collaborative Innovation

Step 3 Project Chartering, Trust Building & Team Alignment
- 3.1 Project Leadership
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- 6.6 Commercial & Legal terms
- 6.7 Alignment of Metrics & Rewards

Step 7 Manage High Performance
- 7.1 Project Alliance Launch
- 7.2 Standards of Excellence
- 7.3 High Performance Coaching
- 7.4 Monthly Health Diagnostics & Risk Monitoring
- 7.5 Mediation as Needed

Step 8 Project Completion
- 8.1 Assess Innovations & Breakdown Responses
- 8.2 Mediation of Allocation of Rewards (if required)
- 8.3 Capture Critical Learning

Program Delivery
NEXT PROJECT

Aligned Project Delivery
Model for Building and Sustaining Project Teams

- Forge common goals and objectives
- Establish/improve working relationships
- Create an environment of trust and teamwork
- Foster a cooperative bond, and facilitate the successful completion of projects
- Create mechanisms to sustain and expand collaboration.

Aligned Project Delivery
Model for Building and Sustaining Project Teams

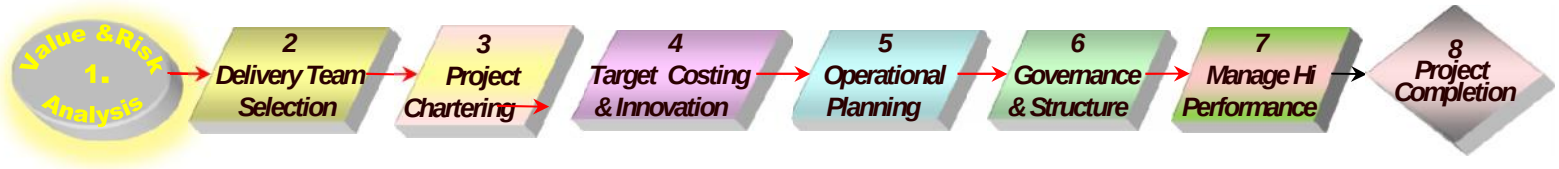
A structured management approach to build a cohesive, co-operative relationship with common goals and established procedures for open and honest communication and issue resolution in a timely manner

Aligned Project Delivery
Model for Building and Sustaining Project Teams

- Reverse backward trend by:
  - **Changing mind sets**
  - **Focus on real issues**
  - **Providing structures & practices for success**
- Start early!
- Does not replace your contract
- Does provide guidance for High Performance Teamwork

Prerequisites

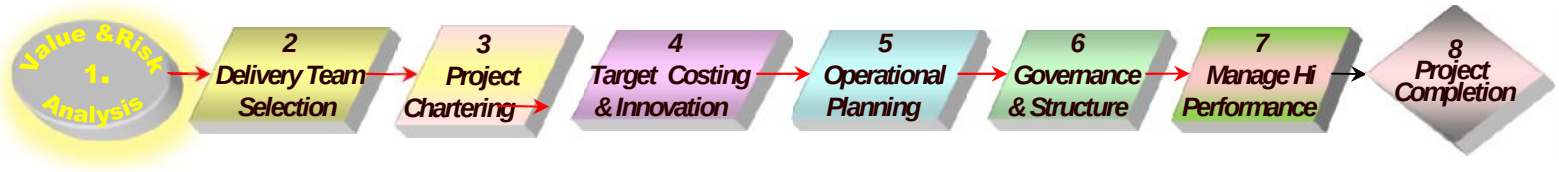
- Equality
- Commitment
- Trust
- Open and honest communication
- Mutual goals and objectives
- Ongoing project performance evaluation
- Timely issue resolution



Phase 1 Value & Risk Analysis

Key Steps

- 1.1 Mission, Purpose, Strategy
- 1.2 Value Proposition
- 1.3 Value Drivers
- 1.4 Preliminary Risk Analysis



Step 1.1 Mission & Purpose:

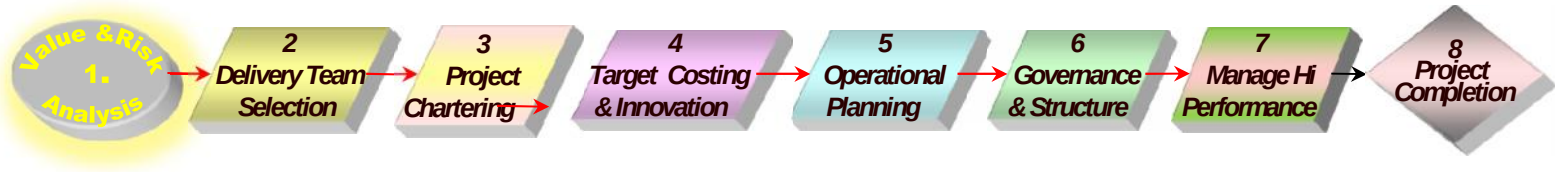
Mission & Purpose

1. **Must be clear & concise**
2. **Must be communicated to EVERYONE**
3. **Make it NOBLE**

Strategy:

Aim of Strategy

- **Convert Mission/Vision and Strategic Assets into Value**
- **Quickly with the Most Efficient use of Resources**

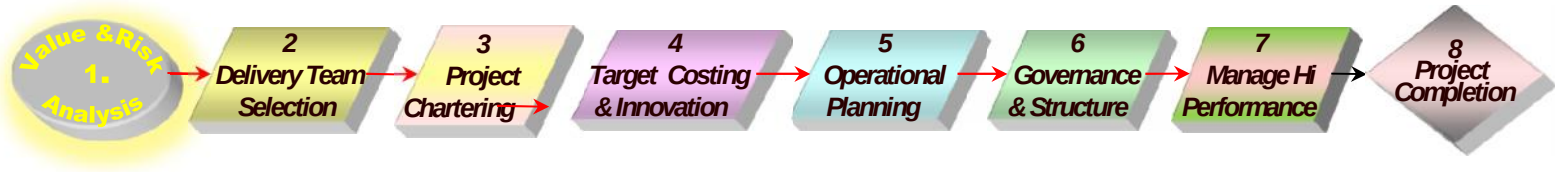


Step 1.2 Value Proposition

Value Proposition is a Mission made Measurable

- Example:

- **On Time**
- **On Budget**
- **100% Safety**
- **0 Litigation**

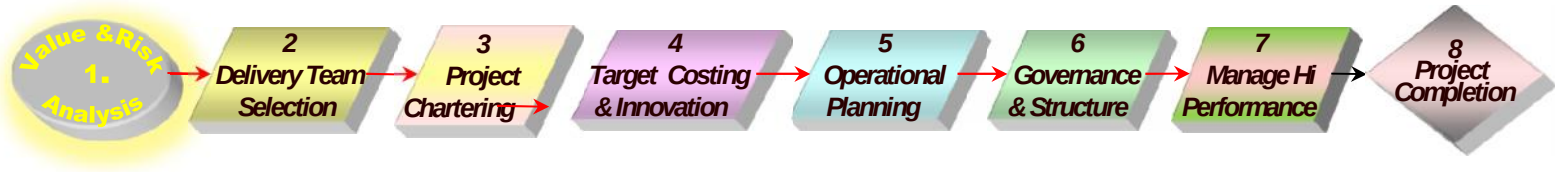


Step 1.3 Value Drivers

Value Drivers are Leverage Points that CAUSE Value to Manifest

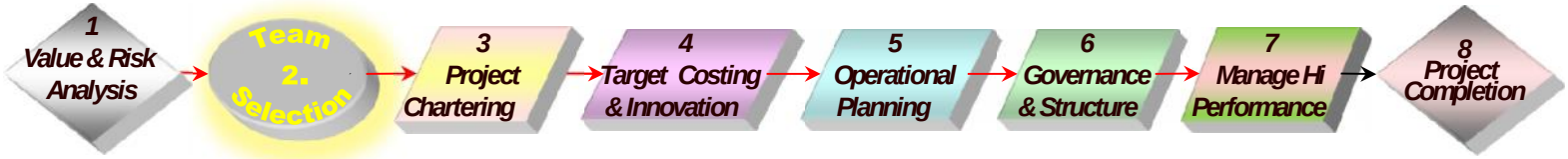
- Examples:

- **Bring the "A" Team**
- **Cross Training**
- **Early Supplier Engagement**
- **On-Site Decision-makers**
- **Anticipate Breakdowns**
- **Total Cost of Ownership**
- **Common Platforms**



Step 1.4 Preliminary Risk Analysis

Ambiguous, Uncertain, Risky, Prone to Breakdown	Clear, Certain, Predictable, Normal Procedure, etc.

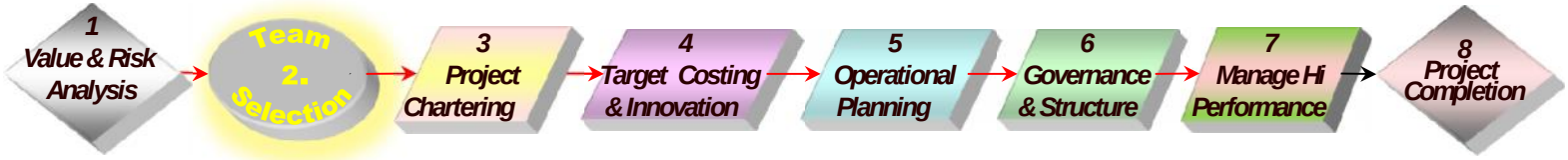


Phase 2. Delivery Team Selection

Key Steps

- **2.1 Collaborative Champions -- Leadership**
- **2.2 High Performance Team**
- **2.3 Collaborative Innovation**

Complexity Requires Collaboration



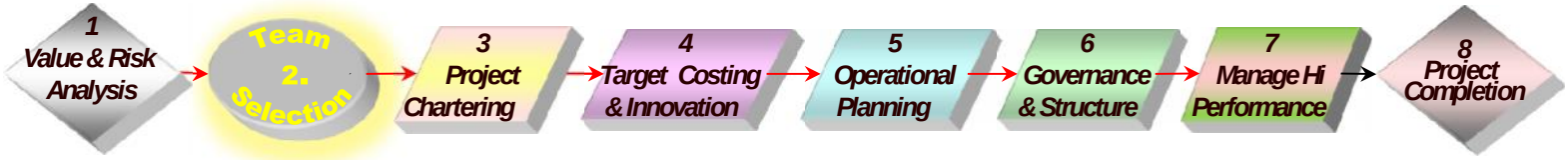
Step 2.1 Collaborative Champions – Leadership

Each Partner Team Needs a Champion

- **Representing each partner organization,**
- **Who intensely believes in the future of the project,**
- **Is Collaborative, Trustworthy, Passionate &Qualified to Lead**
- **Has a vision for the future of the project, along with the competencies to be respected by those committed to success,**
- **Has clear access to, and the confidence of, his or her own CEO or senior sponsoring executive.**

Champion for Each Partner Team

- Visionary
- Energetic, confident optimist with a can-do attitude
- Results oriented with demonstrated leadership and track record of success
- Passionate or charismatic crusader with powerful belief systems
- Credibility and knowledge in the field of endeavor
- Tenacious, perseverant
- Focuses the team on initiating things for the greater good
- Team player, creates buy-in
- Able to build cross-functional relationships and cooperation
- Sees adversity as opportunity, loves challenge—will climb mountains, but gets bored with administrative management duties
- Entrepreneurial, risk taker
- Demanding—works "on the edge"
- Innovative and creative



Step 2.2 High Performance Team --You must hand select and train these people

Competence

- Talents
  - Knowledge & Experience
  - Education, Skills & Abilities
  - Analytic Capacity
  - **Getting Results**

Credibility

- Perceived Value
  - Reputation
  - Deep Wisdom
  - Ability to Deliver
  - Regarded by others

Creativity

- Imagination
  - Resourcefulness
  - Insight & Curiosity
  - Progressive Thinking
  - Problem Solving Capacity

Character

- Who You Are
  - Wisdom, Judgment,
  - Purpose, Mission (Dream & Drive)
  - Values, Honor, Win-Win
  - Trust Building
  - Honesty & Integrity
  - Trustworthiness
  - Discipline, Perseverance, Work Ethic

Compassion

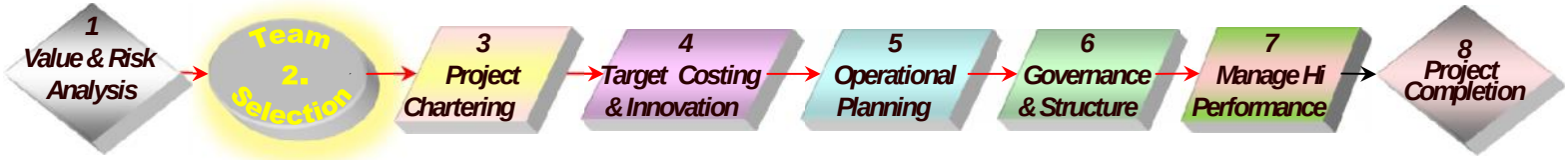
- Caring about Others
  - Empathy, Sensitivity to other's needs & concerns
  - Willingness to Support Others
  - Emotional Maturity

Collaboration

- How you Interact
  - Teamwork, Building Others
  - Sharing, The Golden Rule
  - Communicating, Listening,
  - Giving Credit to Others

Courage

- Championing Spirit
  - Commitment & Enthusiasm
  - Response Under Pressure
  - Ability to live on the edge of uncertainty



Step 2.2 High Performance Team

--You must hand select and train these people

Action Plan

What we Need to do to put the A-Team in place

_____

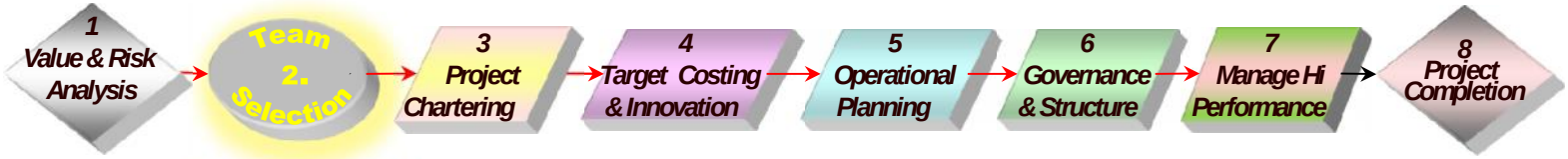
_____

_____

_____

Points to Consider

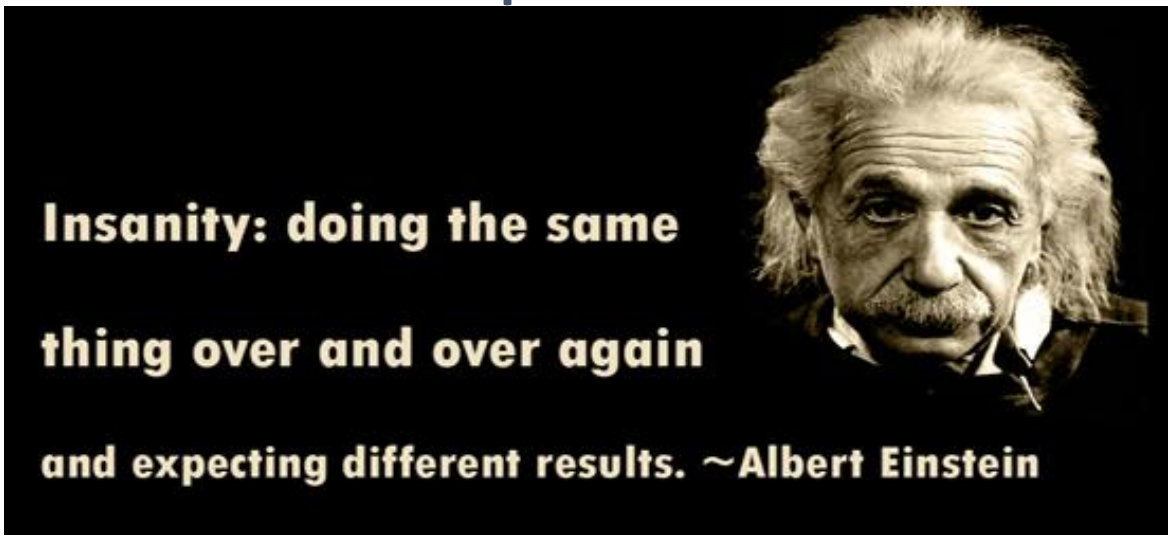
- **Engage HR**
- **Choose the Best**
- **Competence is only part of the Equation**
- **Cross functional experience is advantage**
- **Training is very helpful**



Step 2.3 Collaborative Innovation

- **Major projects are in crisis**
  - Incredibly complex
  - Consistently 50% to 100% cost overruns
- **Blame Game**
- **Our future is at stake**
- **We can fix the problem**

- **Reverse backward trend by:**
  - **Changing mind sets**
  - **Focus on real issues**
- **Start early!**
- **Does not replace your contract**

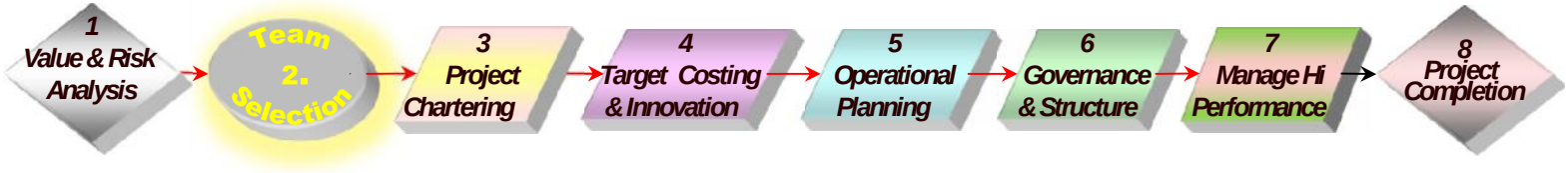


Fresh Thinking is Required

Corollary:
"Problems" **occur at the same level of thinking**

"Opportunities" **emerge at a higher order of thinking**

"Collaborative Innovation" **is the most effective way of shifting thinking**



Step 2.3 Collaborative Innovation

Generate Ideas:

IDEAS ARE FREE

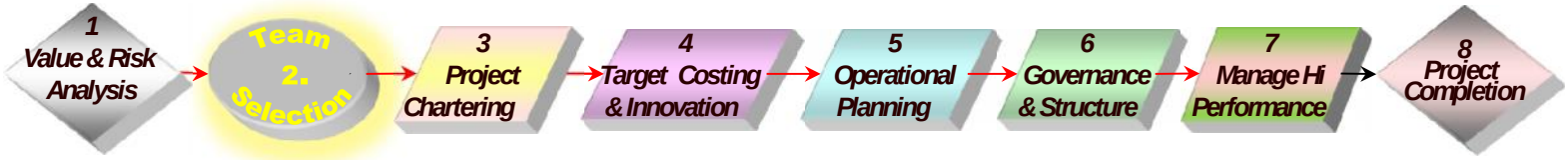
IDEAS ARE THE FUEL OF

THE INNOVATION ENGINE

Implement Lots of Ideas:

FAST (Beware of Bureaucracy)

Better Solutions Arise Crossing Boundaries

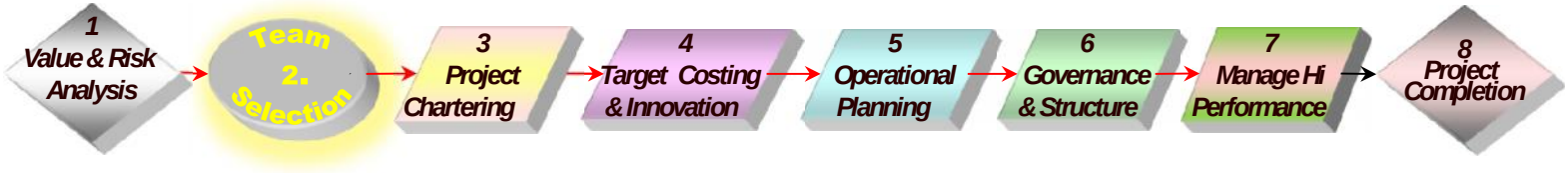


Step 2.3 Collaborative Innovation

Where to Get IDEAS

Innovation Triggers

- ✓ In the "Cracks" between Functions & Organizations
- ✓ Where people are Frustrated or Under-used
- ✓ Customers or Suppliers are Complaining
- ✓ Repeating Problems & Breakdowns
- ✓ High Total Cost of Ownership
- ✓ Despair or Depression
- ✓ Duplication of Effort
- ✓ Unsettling Emotions
- ✓ Dysfunctionalities
- ✓ Confusion
- ✓ Isolation
- ✓ ReWork
- ✓ Dreams
- ✓ Anxiety
- ✓ Breakdown
- ✓ Separateness
- ✓ Lack of Synergy
- ✓ Short Life Cycles
- ✓ Lost Opportunities
- ✓ Non-Value Added Work
- ✓ Excessive/Wasted Time
- ✓ Adversarial Relationships



Step 2.3 Collaborative Innovation

What Innovation Triggers might Produce/Create Value?

Innovation Triggers

⇒ _____

⇒ _____

⇒ _____

⇒ _____

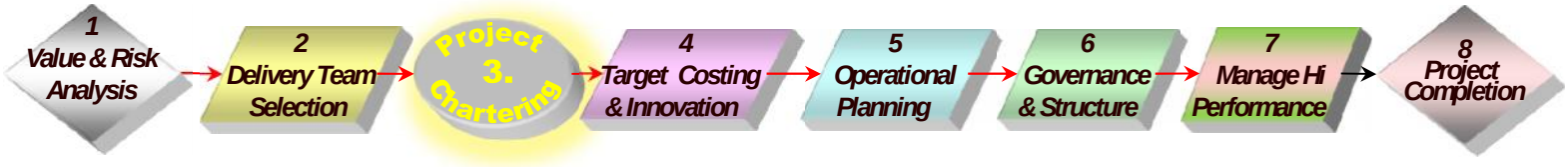
What would be the impact of these new innovations?

⇒ _____

⇒ _____

⇒ _____

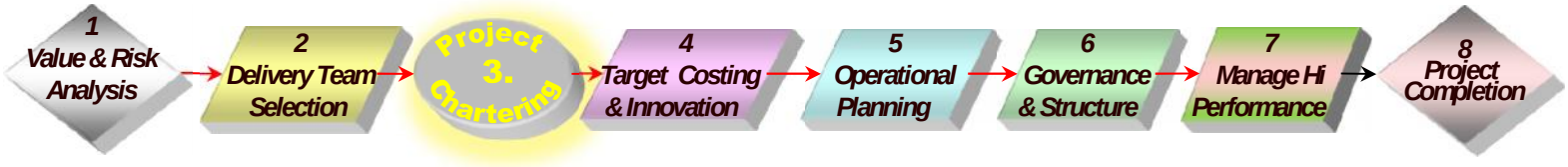
⇒ _____



Phase 3. Project Chartering

Key Steps

- 3.1 Project Leadership
- 3.2 Common Project Vision & Value Proposition
- 3.3 Trust & Teamwork
- 3.4 Operating Principles
- 3.5 Project Charter

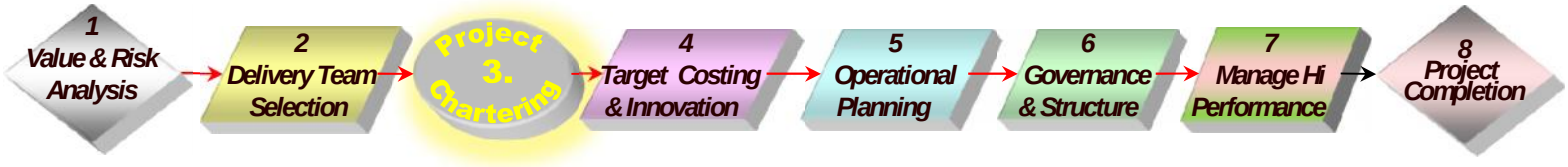


Step 3.1 Project Leadership

Building and Sustaining Project Teams

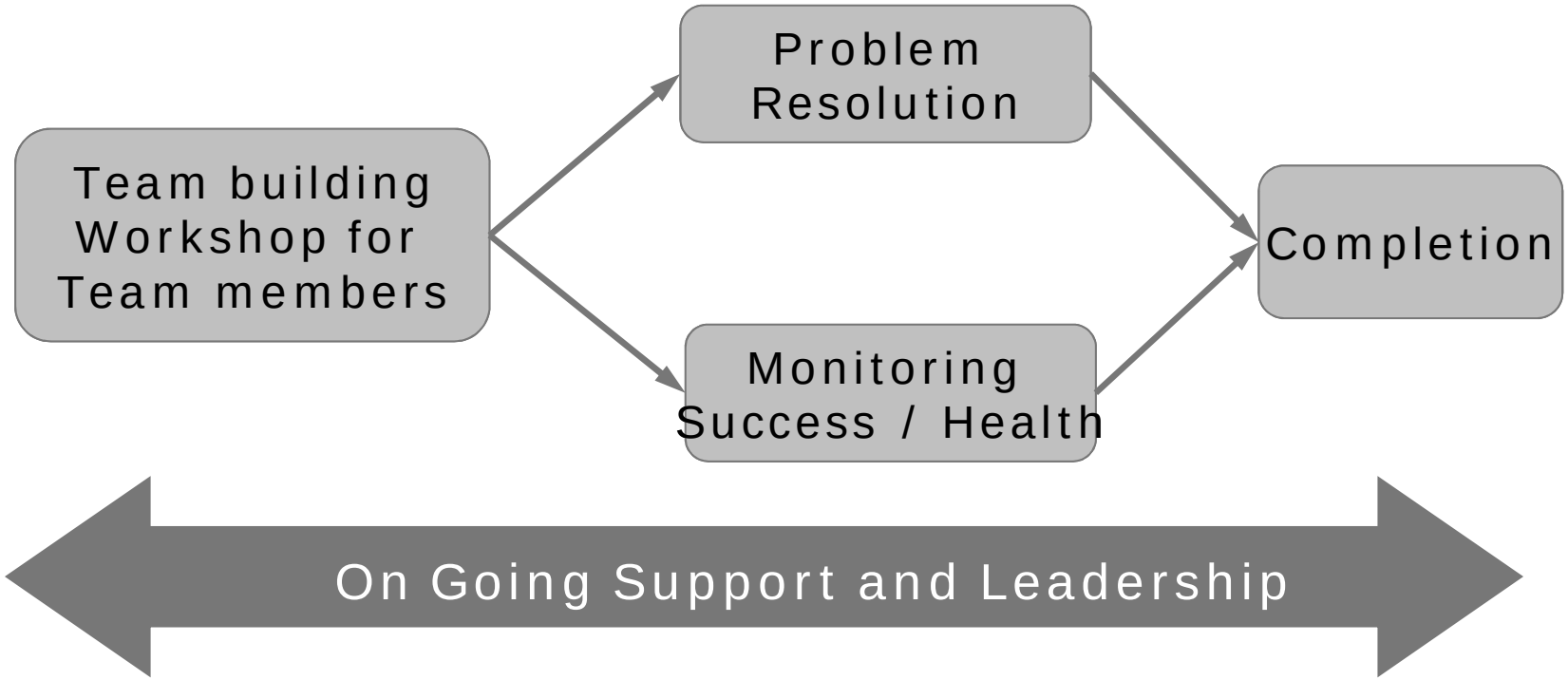
A structured management approach to build a cohesive, co-operative relationship with common vision & goals and established procedures for open and honest communication and issue resolution in a timely manner

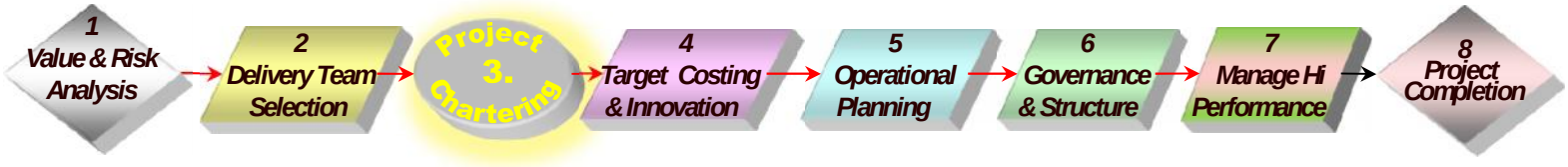
- **A Statement of Purpose and Direction**
  - **Forge common vision, goals and objectives**
  - **Captures the business aim or purpose of the project in one or two sentences.**
    - **Action oriented**
    - **Short and simple**
    - **Understandable**
- **Establish/improve working relationships**
- **Create an environment of trust and teamwork**
- **Foster a cooperative bond, and facilitate the successful completion of projects**
- **Create mechanisms to sustain and expand collaboration.**



Step 3.1 Project Leadership

Building and Sustaining Project Teams

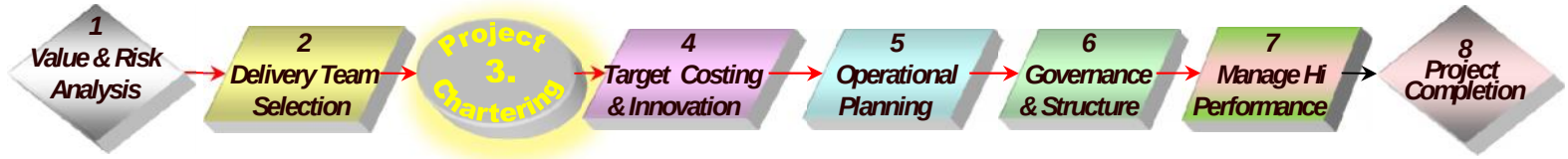




Step 3.1 Project Leadership

Prerequisites

- ❖Mutual Vision, Goals and Objectives
- ❖Commitment
- ❖Trust , Respect, & Equality
- ❖Open and honest communication
- ❖Ongoing project performance evaluation
- ❖Timely issue resolution



Step 3.2 Common Project Vision, Goals, & Value Proposition

Rate Your Common View
on a Scale of:

	-5 Misaligned or Contradictory	0 Vague-Ambiguous	+5 Clear + Aligned
❖ **Common View of:**			
1. **Driving Forces……**	_____	_____	_____
2. **Vision of the Future Result Needed ……**	_____	_____	_____
3. **Value Proposition ……**	_____	_____	_____
	_____	_____	_____
4. **Actions, Practices & Priorities Required to Win**	_____	_____	_____
5. **Metrics to Measure Success ……**	_____	_____	_____
6. **Rewards & Compensation ……**	_____	_____	_____
❖ **What do we need to do to get clarity?**	_____	_____	_____

Creating Value

Strategy

Potential Value Contribution

Obsolete the Competition

5. Value Creation Strategy

Pathways

- Value Expansion
- Value Innovation
- Value Transformation
- Value Integration
- Value Evolution

Beat the Competition

4. Value Addition Strategy

Pathways

- Value Capture
- Value Compounding
- Value Sharing
- Value Amplification
- Value Adaptation
- Value Acceleration
- Asset Leveraging

Out-Deal the Competition

3. Value Transaction Strategy

Pathways

- Value Trading
- Value Transfer
- Value Division
- Value Extraction
- Value Reaping
- Value Commoditization

Protect Against the Competition

2. Value Protection Strategy

Pathways

- Auditing
- Contract Management
- Risk Management
- Procurement Controls
- Value Hording

1. Value Depreciation Strategy

Pathways

- Tax Depreciation
- Non-Value Added Work
- Value Manipulation
- Value Neglect & Inertia
- Value Squeeze
- Litigation
- Value Demolition

Adversarial -- Transactional -- Collaborative

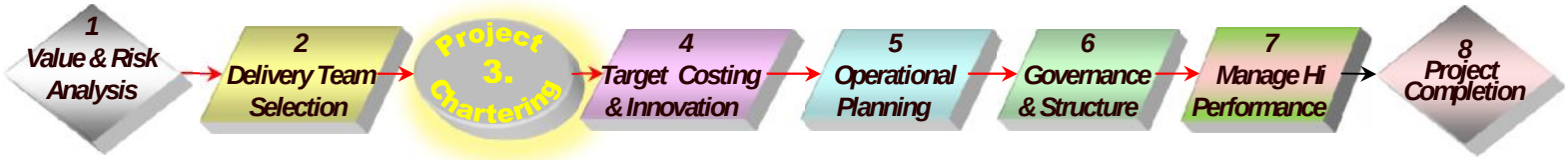
Relationship

Value Design Architecture

Value Maximization Stairway

Integration Required

Fundamental Concept

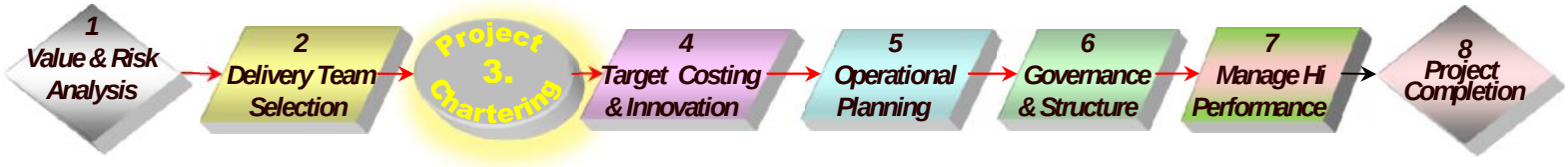


Step 3.3 Trust & Teamwork

Why Teams Fail

Resulting in Dysfunction or Poor Performance

1. **Lack of Trust**
   - Blame game, Complaining, Criticism, Negativity
   - Selfishness, No Caring/Respect about others
   - Manipulation, Deceit
   - No Means of Resolving Conflict
   - Fear (unsafe, disrespect, insecure)
   - Losing Attitude, Low Standards,
   - Poor Synchronization
2. **Lack of Purpose/Mission**
   - Poor Focus/Goal or Role Clarity
   - No Accountability/Commitment
3. **Lack of Results & Empowerment**
   - Insufficient Delegation, Recognition or Reward
   - No one cares, I don't make a difference
4. **Lack of Learning/Innovation/Creativity**
   - Breakdowns in Face of Adversity
5. **Lack of Competency/Skills/Experience**
6. **Lack of Collaborative Leadership**



Step 3.3 Trust & Teamwork

- **Establish/improve working relationships**
- **Remove Barriers to Collaboration-- Problems and barriers that have prevented collaboration in the past**

The parties to separately answer the following:

1. **What actions do the other groups engage in that create problems for us? *Or What others do to affect us?***
2. **What actions do we engage in that we think create problems for others? *What we do to affect others?***
3. **What recommendations would we make to improve the situation? *How to improve the situation?***

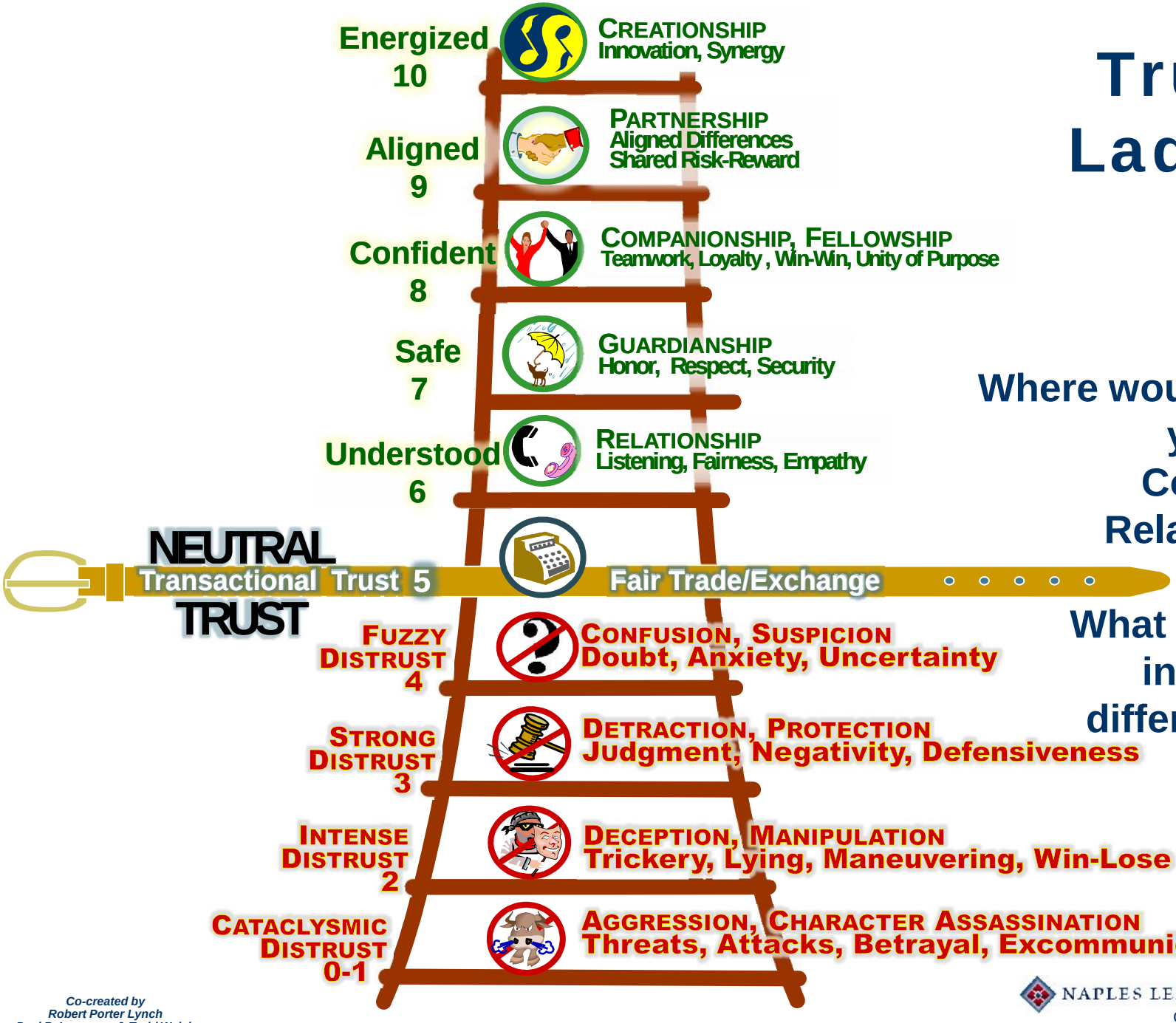
- **30 minutes for preparation**
- **30 minutes for discussion**

"Loyalty to your comrades, when you come right down to it, has more to do with bravery in battle than even patriotism does.

You may want to be brave, but your spirit can desert you when things really get rough.

Only you find you can't let your comrades down and in the pinch they can't let you down either."
– Audie Murphy, most decorated soldier of WWII

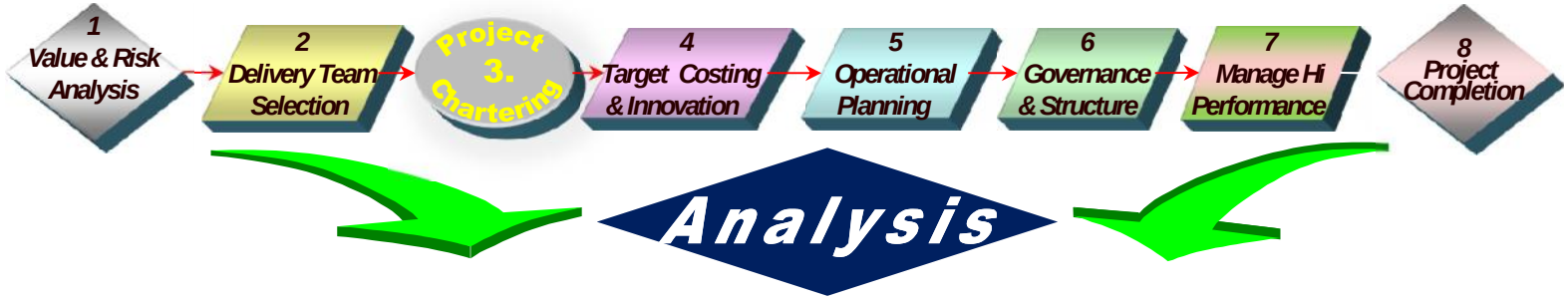
Trust Ladder



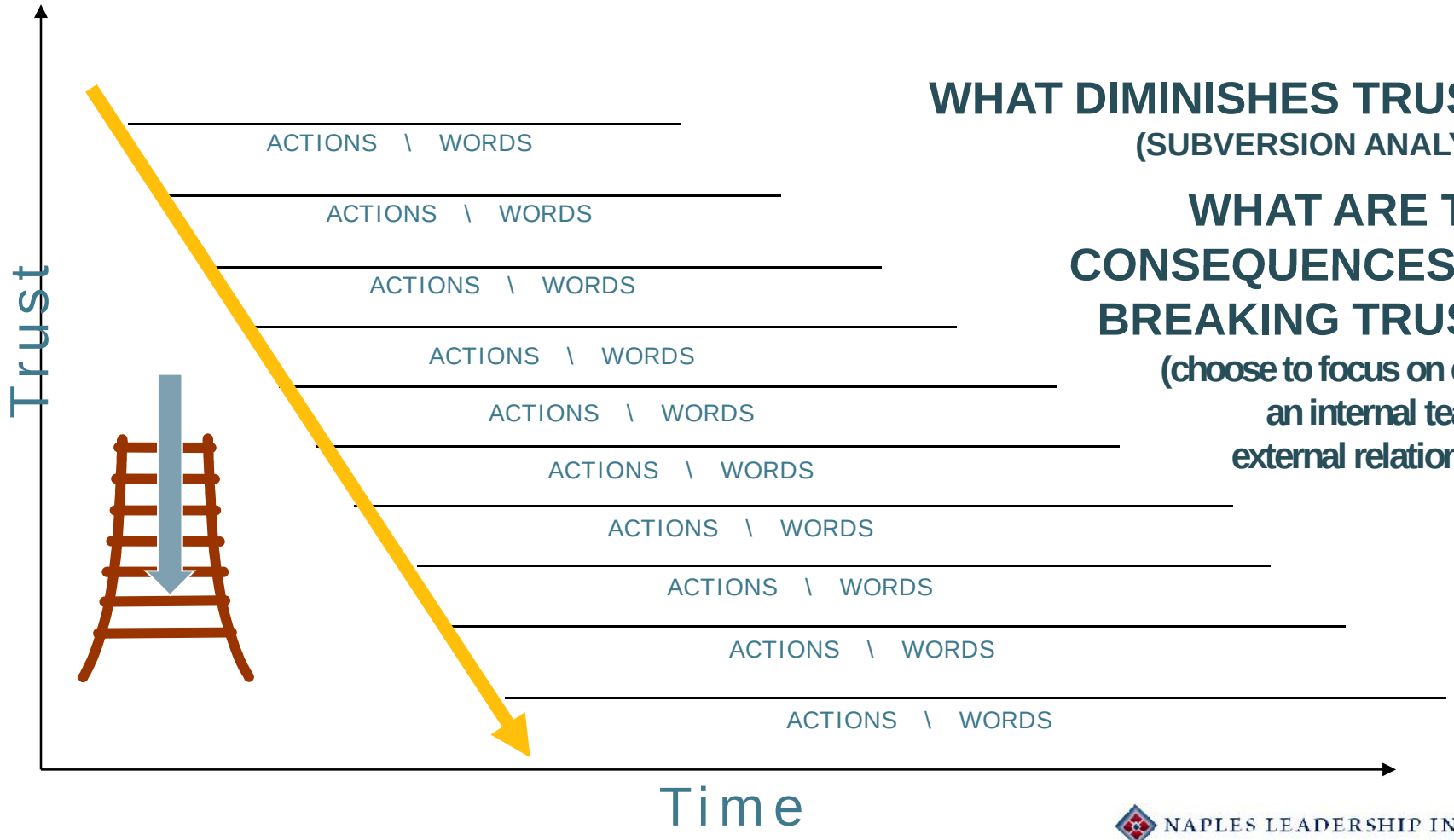
Where would you rate your typical Construction Relationships?

What happens to innovation at different levels?

Co-created by
Robert Porter Lynch
Paul R. Lawrence & Todd Welch

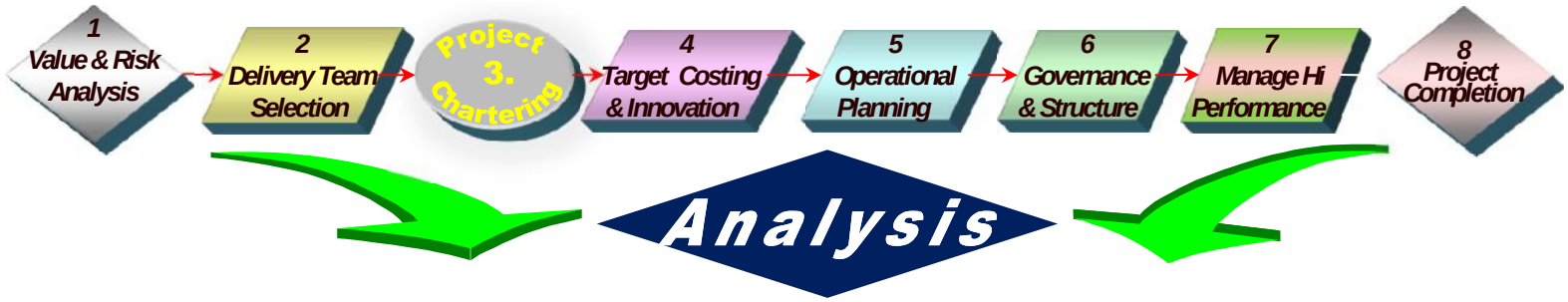


Trust Busters



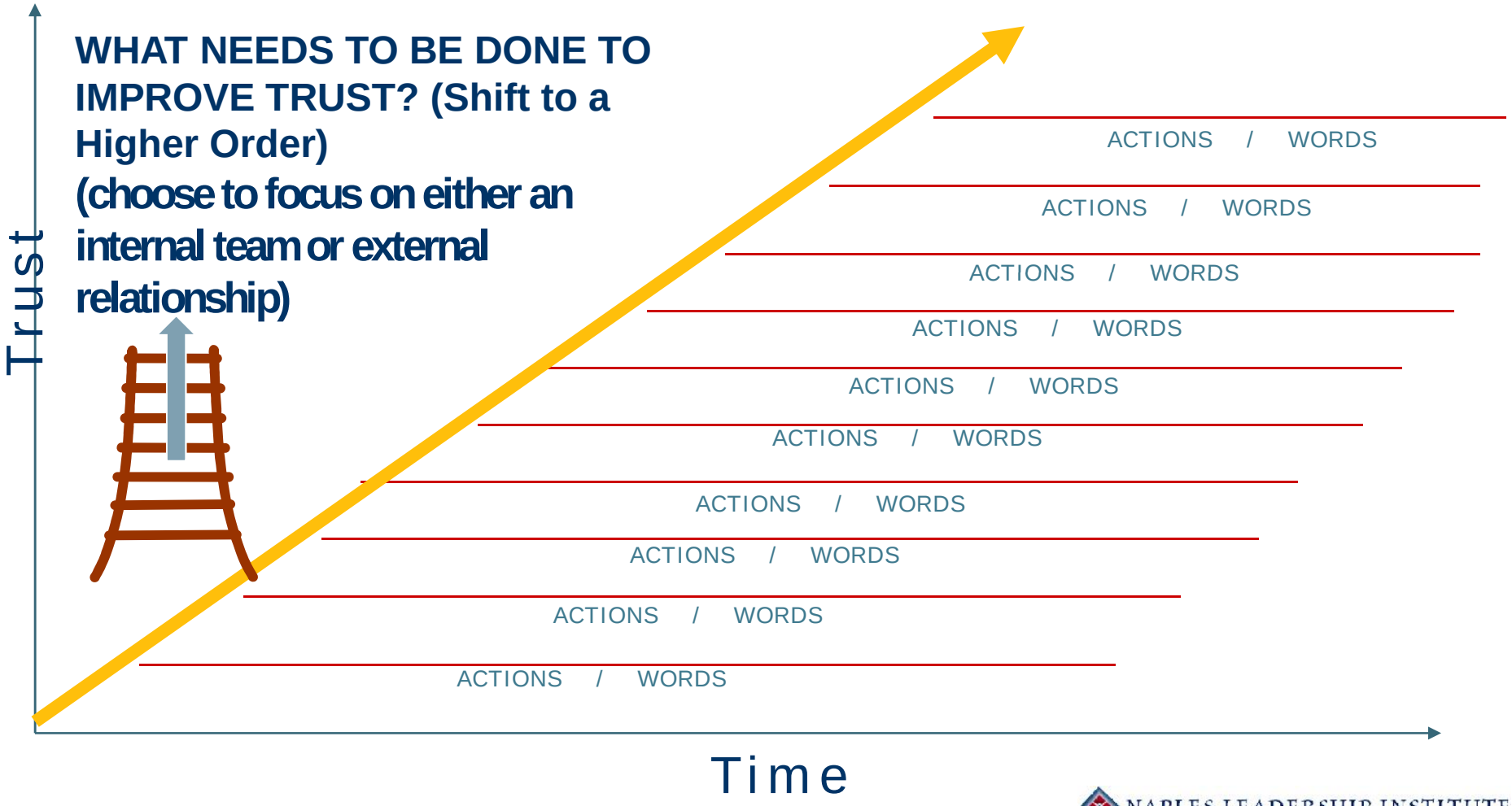
WHAT DIMINISHES TRUST?
(SUBVERSION ANALYSIS)

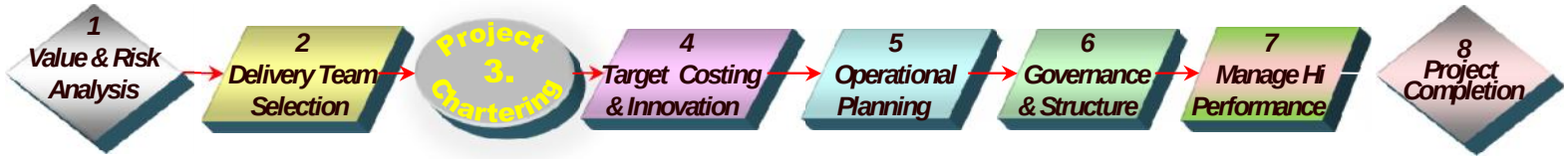
WHAT ARE THE CONSEQUENCES OF BREAKING TRUST?
(choose to focus on either an internal team or external relationship)



Trust Builders

WHAT NEEDS TO BE DONE TO IMPROVE TRUST? (Shift to a Higher Order)
(choose to focus on either an internal team or external relationship)





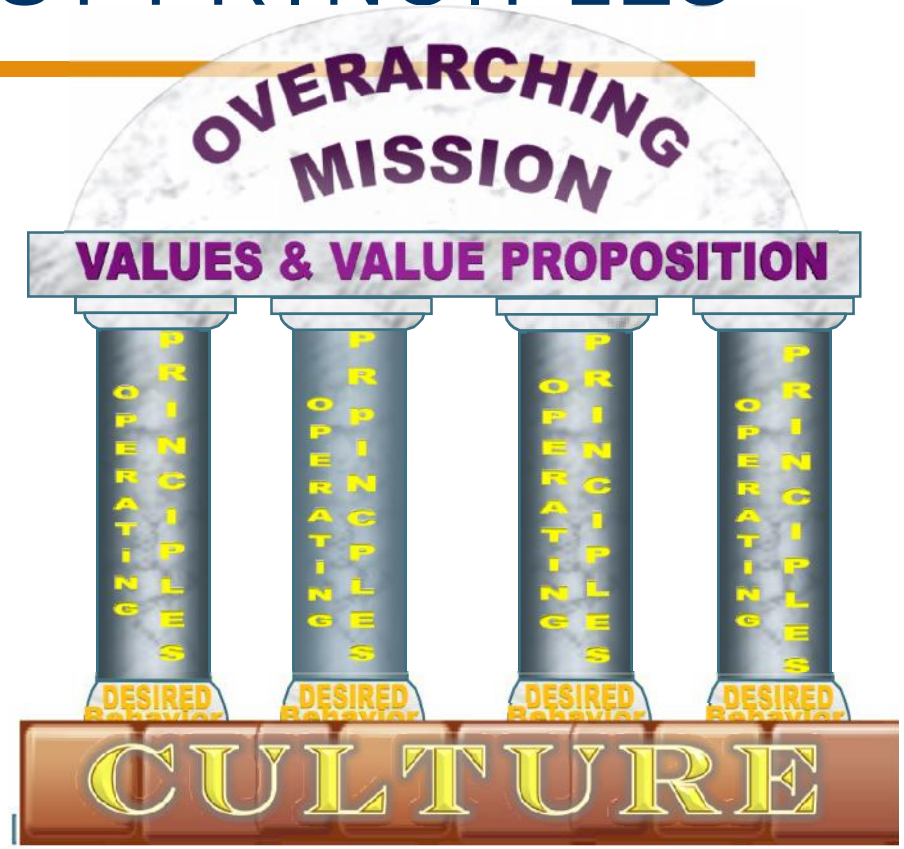
Step 3.4 Operating Principles

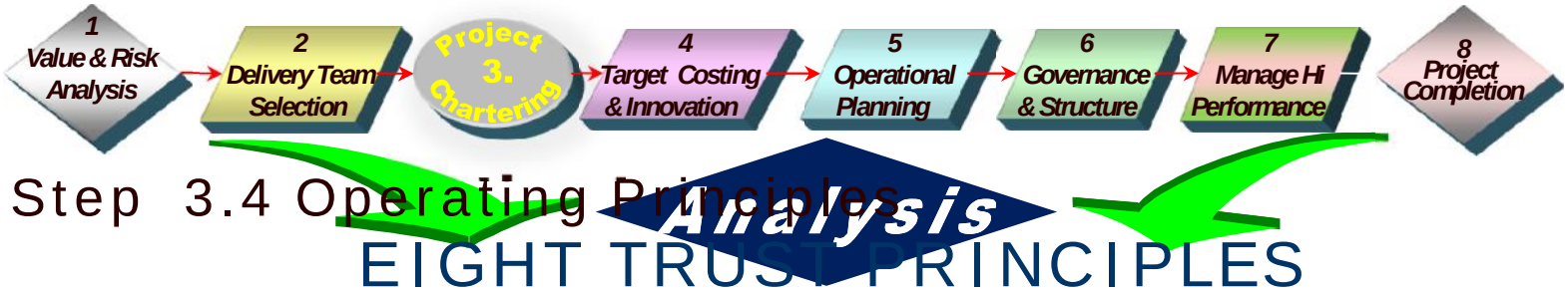
EIGHT TRUST PRINCIPLES

Trust Principles are **Guidelines** (Not Laws)

- Timeless & Enduring
- Help Climb the Ladder of Trust
- Focus on Behavior (not Values)
- Require Wisdom* & Discipline

Powerful when combined with Value Propositions to which people are committed & accountable





Step 3.4 Operating Principles

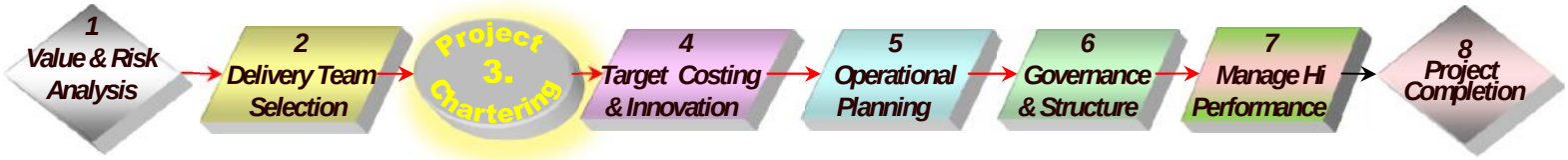
EIGHT TRUST PRINCIPLES

1. **F**airness & Reciprocity for the Good of All
2. **A**ccountability (*External*) & Integrity (*Internal*)
3. **R**espect, Empathy & Honor
4. **T**ruthfulness, Candor & Courage
5. **H**onourable Purpose & Aligned Vision
6. **E**thics & Excellence *(Standards)*
7. **S**afety *(Physical)* & Security *(Social & Economic)*
8. **T**ransparency & Openness

Anything Less Creates Fuzzy Distrust

Best Practice

CREATING CULTURE



Step 3.4 Operating Principles

Memorialize the Trust Principles by Creating a Joint Operating Agreement

❖Organizational Values -- **"Heady"**

- **Core Beliefs or Philosophies**
- **Aspirations & Highest Purpose**

Examples:

- **Respect, Accountability, Integrity, Timeliness, Loyalty, Meaningfulness, Helpful, Friendship, Success, Reliable, Wealth, Self-reliance, Competence, Problem-solving, Service To Others, Collaboration, Honesty, Quality, etc.**

Operating Principles – "**Action**"

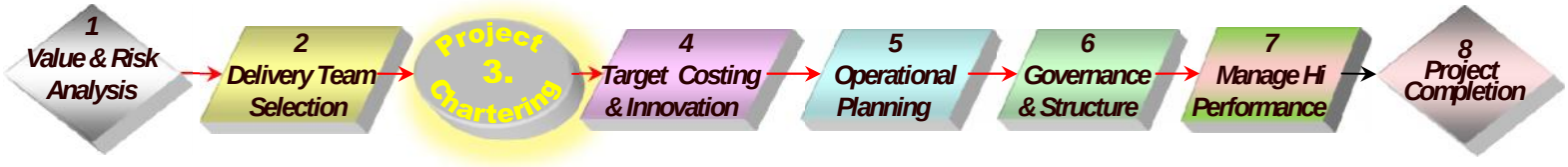
- **Guidance on how to ACT every day**
- **Establishes Spirit of Agreement**

Jointly Created, Agreed Upon, and Adhered to

Covenant Signed by all Alliance Members

- ✓ Provides Broad Understanding of Quality of Interaction
- ✓ Gives Deeper Meaning to the Agreement or Contract
- ✓ Guides Decision-making in situations of Ambiguity or where Contract is Obsolete or Inadequate
- ✓ Helps bring new people on board
- ✓ Sets parameters for a culture cooperation

DO THIS BEFORE SIGNING ANY LEGAL AGREEMENTS



Step 3.5 Project Charter

TASK: Create a Project Charter

It should be composed of at least Three Components:

1. **Mission Statement – the Purpose of Our Project**
2. **Key Goals & Objectives – How we will know we succeeded**
3. **Operating Principles – How we will work together**

(see following pages for ideas)

Project Charter
Example

NE LRT EXTENTION TEAM
Program Guiding Principles

We, the NE LRT Extension Team, recognized the complexity of the overall program and the individual projects, commit to a collaborative process through mutual respect, effective communication and trust to achieve a successful opening of the LRT to Westwinds by September 2007 and the Oliver Bowen Maintenance Facility (OBMF) by June 2008.

We will achieve this through:

- Improved project communications by committing to develop a structured communication plan for internal and external stakeholders.
- Use and promote best practices for safety.
- Trusting the expertise of individuals involved in the project.
- Minimizing disruption to the public and environment during construction.
- Accept responsibilities of individual project schedules as they relate to key shared milestones.
- Commit to embrace and use when necessary an effective conflict resolution plan.
- Having fun and celebrating success.
- Manage stakeholder expectations.

Project Charter

Example

NE LRT EXTENTION TEAM

Analysis

We, the NE LRT Extension Team, recognize the complexity of the overall program and the individual project responsibilities, commit to a collaborative process through mutual respect, effective communication and trust to achieve a successful opening of the LRT to Saddle Towne by September 2012.

THE CITY OF CALGARY TRANSPORTATION INFRASTRUCTURE

ENMAX

Stantec

GEC architecture

We, the YYC Runway Development Program City of Calgary Airport Trail Tunnel teams will meet the following milestone dates:

- Zone 1 under runway – Aug 31, 2012
- Zone 2/3 under Taxiways – October 31, 2012
- Structure completion – October 31, 2012
- Zone 4/5 under perimeter roads – June 30, 2013
- Runway in service – May 2014

PCL PARSONS Dufferin Construction CH2MHILL AECOM

Associated Engineering GLOBAL PERSPECTIVE. LOCAL FOCUS.

Project Charter

Example

Our Common Goals and Objectives

- *We, the partners of the Deerfoot Trail maintenance team, recognizing the unique nature of this project, commit to creating an environment of trust and communication to deliver a quality project which meets or exceeds the customer's requirements. We commit to maintaining a positive and optimistic work environment in which all partners goals can be achieved.*

- *After discussion it was agreed that the partnering objectives for the maintenance contract are:*
- To obtain maximum value for money from the term maintenance contract for Alberta Infrastructure and for Carmacks to obtain a reasonable profit.
- To provide high quality work that minimises the inconvenience to the travelling public and is completed on time in a safe method.
- To provide an environment in which both Alberta Infrastructure and Carmacks personnel work co-operatively to optimise this contract to both parties.
- To provide an environment where the avoidance of disputes and conflicts is fundamental to the relationship between the parties.
- To provide a non-confrontational forum for the resolution of any disputes which do arise.
- To improve budget management by earlier payment of accounts and better communication of cost overruns and changes.
- To properly control costs.
- To encourage innovation.
- To develop a closer relationship with client and engineer to avoid misunderstandings - develop trust.
- To understand each parties role within the project team and to build and maintain good relationships based upon trust, respect and honesty.
- To manage the project efficiently and minimize bureaucracy.
- To achieve the above by performing in a manner which will ensure success of the project.
- To get it right the first time.
- To have fun.

Project Charter

Example

Rockyview General Hospital

Capital Project 2004

We, the team of the Redevelopment Project, recognizing the unique nature of this project, commit to creating an environment of trust and open communication to deliver a quality project, which meets or exceeds each stakeholder group's requirements.

We commit to maintaining a seamless, positive, and optimistic work environment in which all partners' goals can be achieved.

The following goals and objectives were agreed and recorded as the Partnering Team Charter for the project.

1. **Produce a project that is safe in its design, construction, maintenance and use.**
2. **Create a safe-working environment resulting in zero lost-time incidents.**
3. **Minimize the inconvenience to the patients, visitors, care providers and protect the facility, community and the environment.**
4. **Design and construct a project of optimum quality, which is functional, flexible, maintainable, sustainable and of which we are proud.**
5. **Goal of project is to have zero claims.**
6. **Provide a non-confrontational forum for the resolution of any disputes that arise.**
7. **Encourage innovation and creativity.**
8. **Understand each party's role within the project team and develop good relationships based upon trust, respect and honesty.**
9. **Manage the project effectively, efficiently and manage stakeholder change requests.**
10. **Incorporate and share lessons learned from other projects and gained from outside sources/experience.**
11. **Maintain positive, cooperative relationships through; clear and open communication, no surprises, no hidden agendas, minimum delays of paperwork, and resolution of problems quickly at the lowest level.**
12. **Prepare, update, and share common project schedule.**
13. **Deliver project on schedule and within budget.**
14. **Co-ordinate efficiently with other hospital projects as much as possible.**
15. **Empowerment of all team members to allow decision making at all levels.**
16. **Improve budget management by regular review and tracking of cost accounts and early communication of cost overruns and changes.**
17. **Manage scope changes in a fair and timely manner.**
18. **Acknowledge the requirements connected with infection, prevention and control.**
19. **Have fun and create an enjoyable work environment.**

NAPLES LEADERSHIP INSTITUTE

Project Charter
Example

COLLEX
Maunsell McIntyre BARCLAY MOWLEM
Committed to outstanding outcomes

Woodlawn Bioreactor Project
Alliance Charter

MISSION

To develop and commission an environmentally responsible Bioreactor system that sets a benchmark of excellence for waste management.

Our reasoning, actions, and behavior will be guided by the Alliance

OPERATING PRINCIPLES

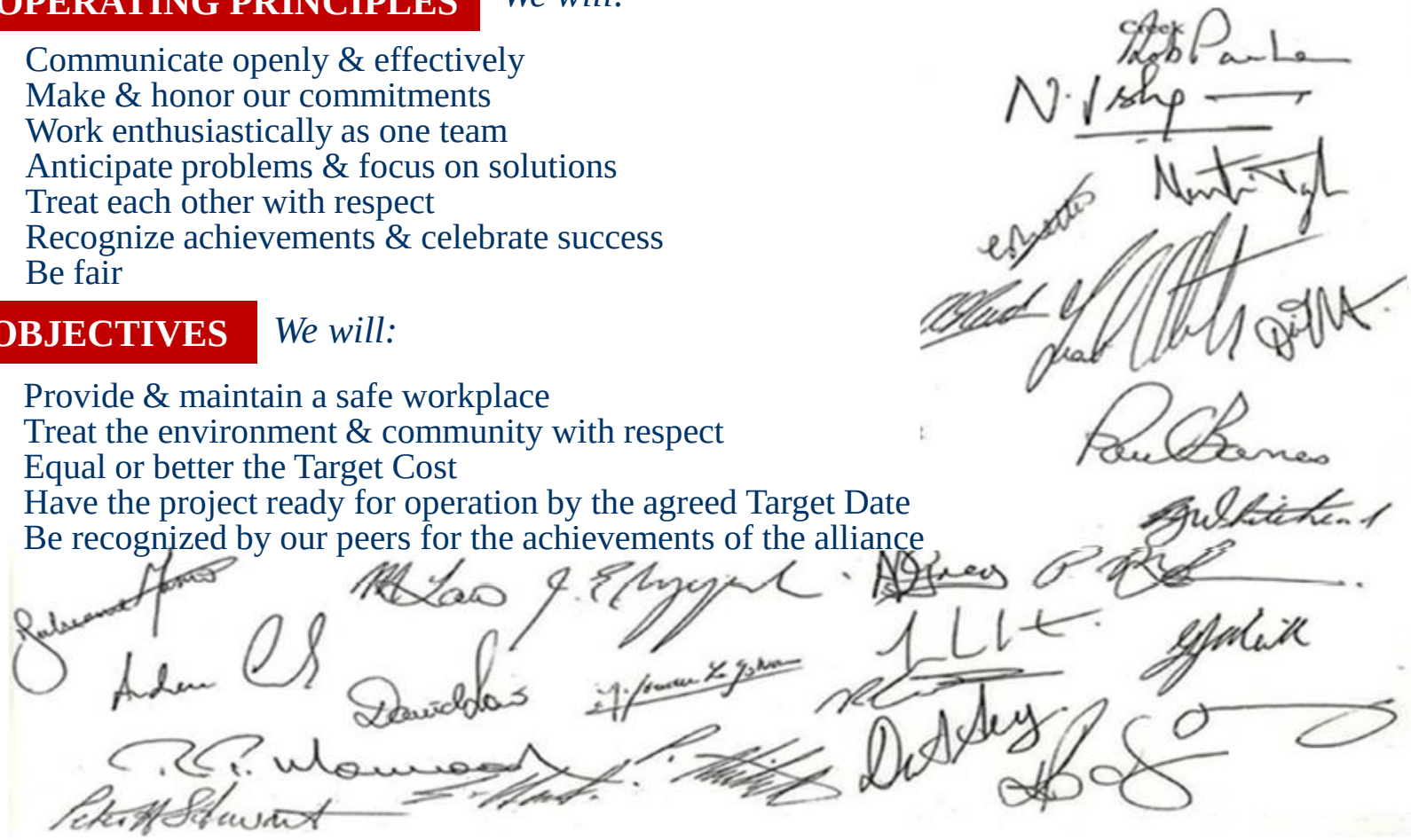
We will:

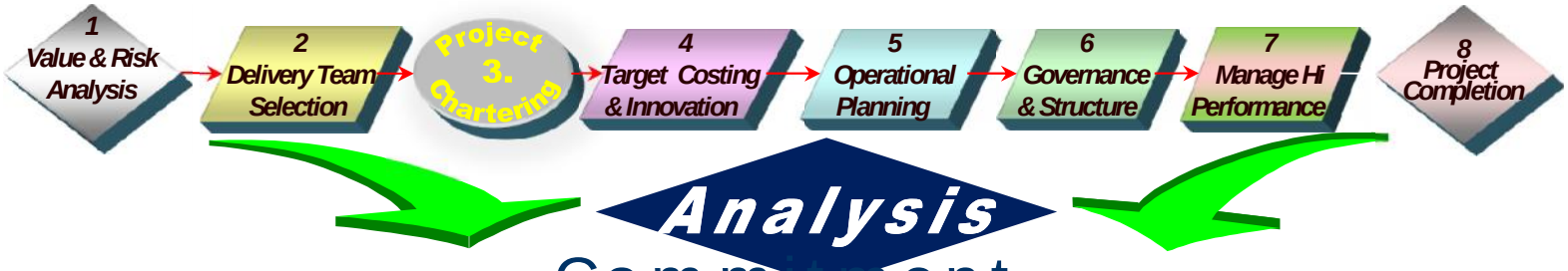
- Communicate openly & effectively
- Make & honor our commitments
- Work enthusiastically as one team
- Anticipate problems & focus on solutions
- Treat each other with respect
- Recognize achievements & celebrate success
- Be fair

OBJECTIVES

We will:

- Provide & maintain a safe workplace
- Treat the environment & community with respect
- Equal or better the Target Cost
- Have the project ready for operation by the agreed Target Date
- Be recognized by our peers for the achievements of the alliance





Commitment

Commitment is what transforms a promise into reality.

******

It is the words that speak boldly of your intentions.
And the actions which speak louder than the words.

******

It is making the time when there is none.
Coming through time after time after time, year after year after year.

******

Commitment is the stuff character is made of;
the power to change the face of things.

******

It is the daily triumph of integrity over skepticism,
of vision over fear.

******

Courage is being committed to something larger than your fears.

adapted from Shearson Lehman

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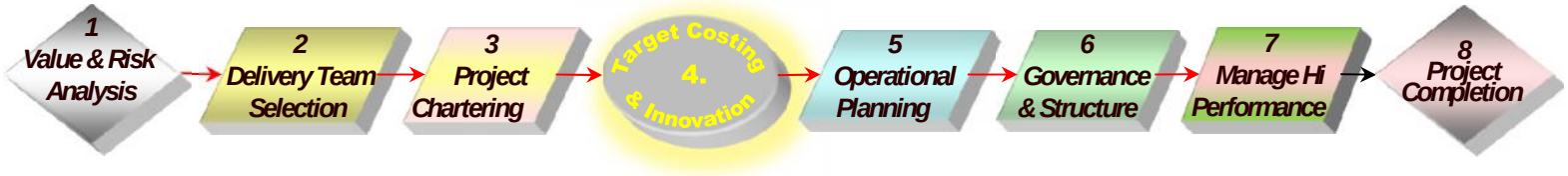
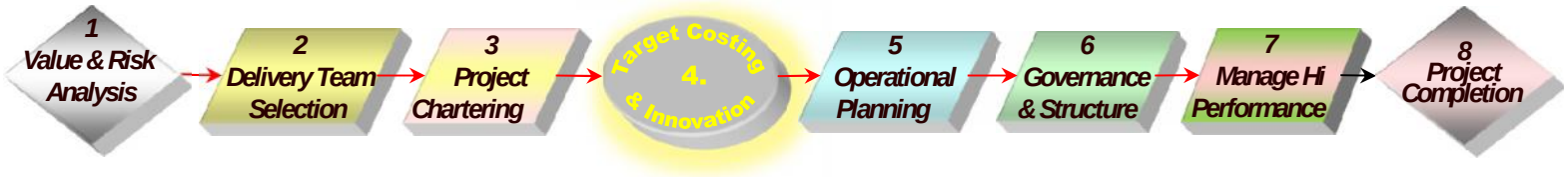


4. Target Costing & Innovation

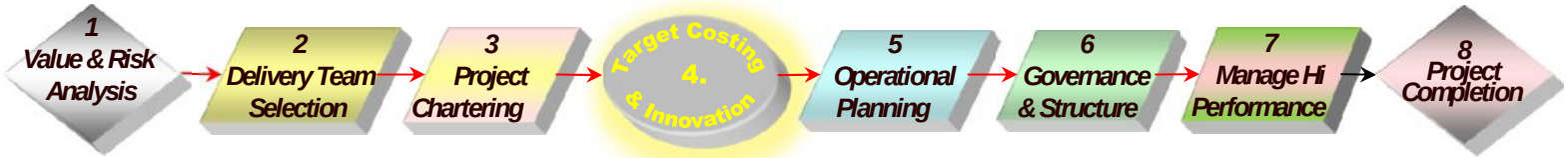
Key Steps

- 4.1 Holistic Risk Analysis
- 4.2 Project Scope
- 4.3 Key Factors for Success
- 4.4 Supply Chain Analysis
- 4.5 Innovation Priorities
- 4.6 Target Costing Interaction
- 4.7 Risk-Reward Framework



Step 4.1 Holistic Risk Analysis

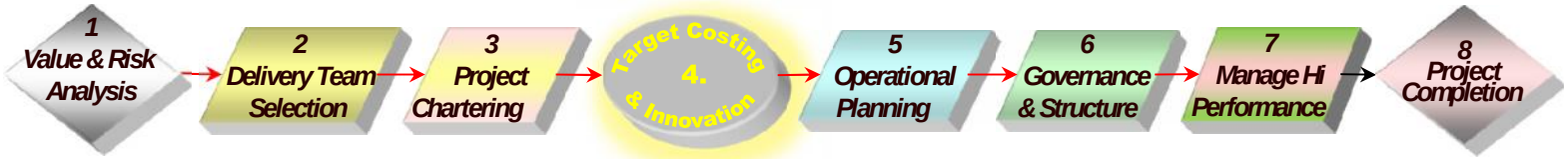
Project Risks



Step 4.1 Holistic Risk Analysis

Reasons for Cost Overruns

- Lack of realism and underestimation of initial cost estimates
- Inappropriate management influence of cost estimates to meet economic hurdles, and ignoring project reality
- Lack of appropriate risk analysis and management expertise
- Contingencies are set too low
- Changes in scope are not sufficiently taken into account
- Lack of discipline and ineffective control of project scope
- Underestimation of the geological/geotechnical risk
- Quantity and price changes are undervalued
- Lack of experienced owner and contractors
- Overall quality of owner and contractor construction management capabilities
- Ineffective organizational and governance structures for mega-projects
- Lack of collaborative relationships and myopic risk allocation strategies
- Inappropriate delegation of owner responsibilities to contractor
- Lack of clear definition of lines of authority and management responsibilities and lack of empowerment



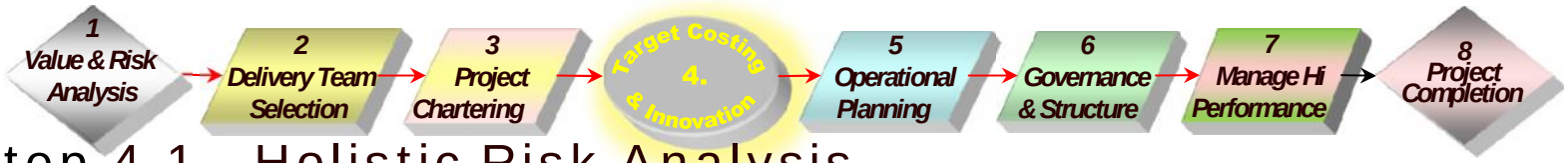
Step 4.1 Holistic Risk Analysis

Typical Project Cost Allocation

- **Engineering: 8 – 15%**
- **Equipment: 32 – 35%**
- **Construction: 50 – 60%**

Engineering is the smallest % with the biggest impact on construction.


Change Order
YAMAHA



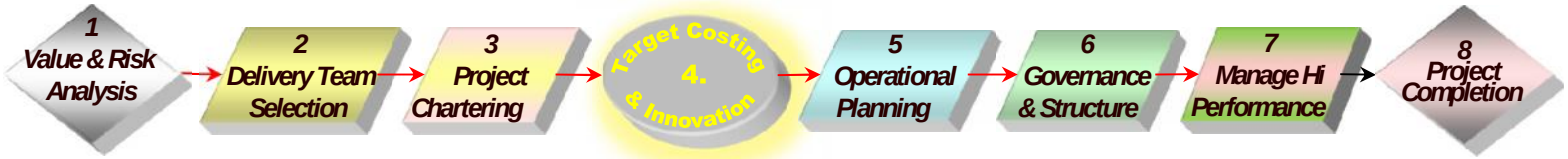
Step 4.1 Holistic Risk Analysis

How Projects are Delivered?

AFE/FID

1	2	3	4	5
PHASE 1 IDENTIFY & Assess Opportunities	**PHASE 2** SELECT from Alternatives	**PHASE 3** DEVELOP Preferred Alternative	**PHASE 4** EXECUTE (Detail EPC)	**PHASE 5** OPERATE & Evaluate
Determine Project Feasibility and Alignment with Business Strategy	**Select the Preferred Project Development Option**	**Finalize Project Scope, Cost and Schedule and Get the Project Funded** **~25 % Engng.**	**Produce an Operating Asset Consistent with Scope, Cost and Schedule**	**Evaluate Asset to Ensure Performance to Specifications and Maximum Return to the Shareholders**
-Feasibility	-DBM - Application	-FEED -Long-Leads - Reg. Approval	- Detailed Design - Procurement - Fabrication -Construction -Commissioning	-Start-Up - Perf'm Testing - De-bottleneck

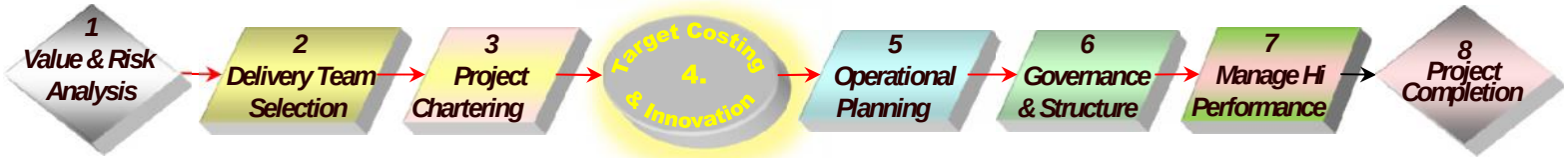
25 % engineering is not enough to provide the required accuracy in the AFE budget!!!



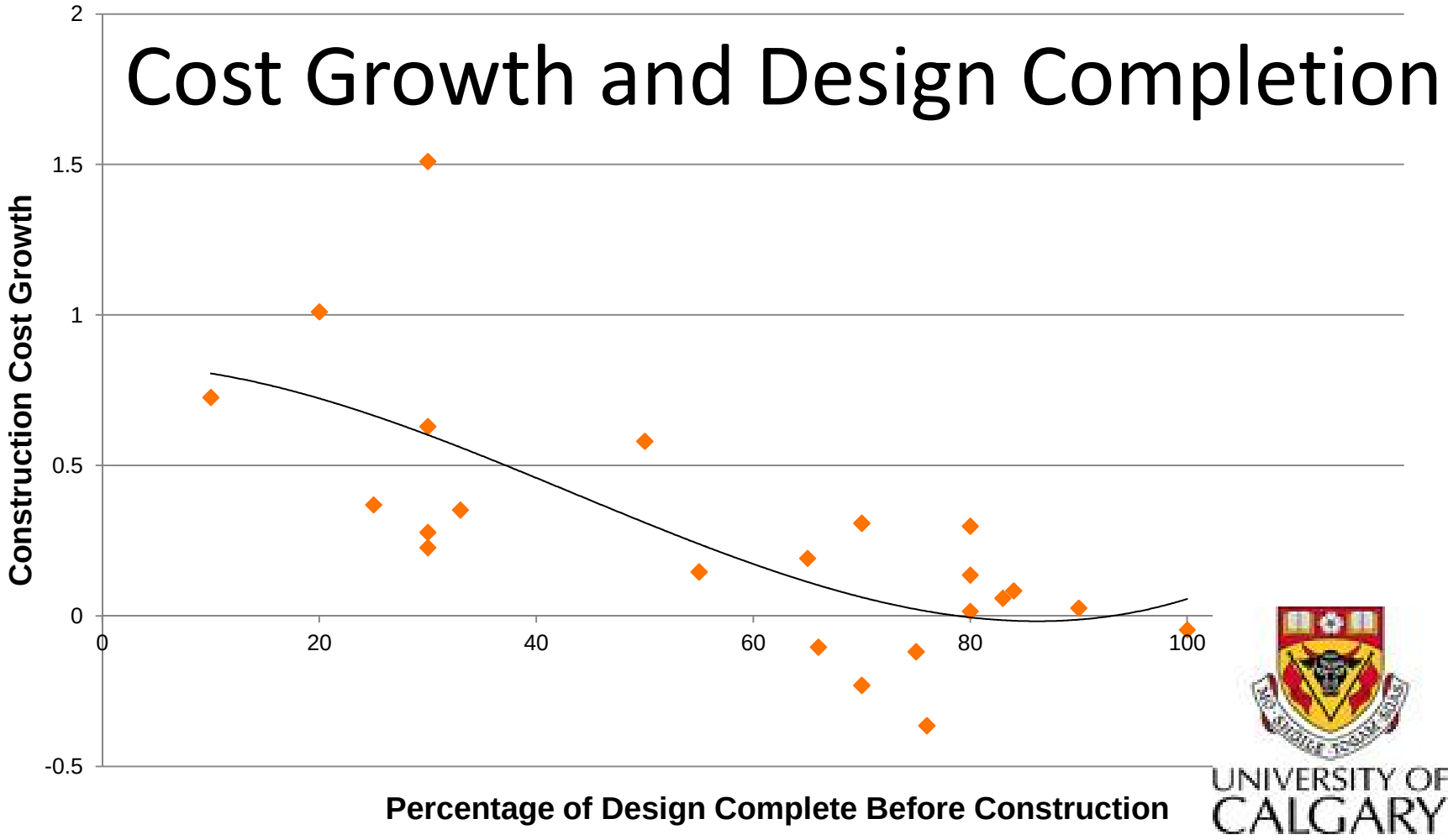
Step 4.1 Holistic Risk Analysis

More % Engineering & Project Planning Complete and Better Quality Design

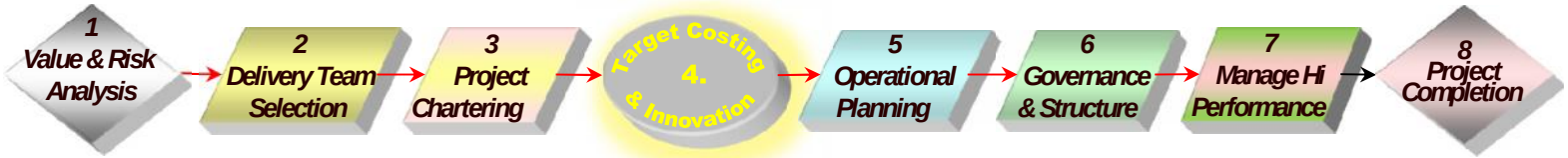
- **Final approval after detailed engineering**
- **80 -100 rule**
  - **80% of engineering complete before mobilizing to site**
  - **100% of IFC drawings before construction**
- **More Coordination & Anticipation of Breakdowns *before Project Launch***
  - **PLAN THRICE – (Conceptual, Practical, then Simulation)**
  - **MEASURE TWICE – (Forwards, then Backwards)**
  - **CUT ONCE**



Step 4.1 Holistic Risk Analysis



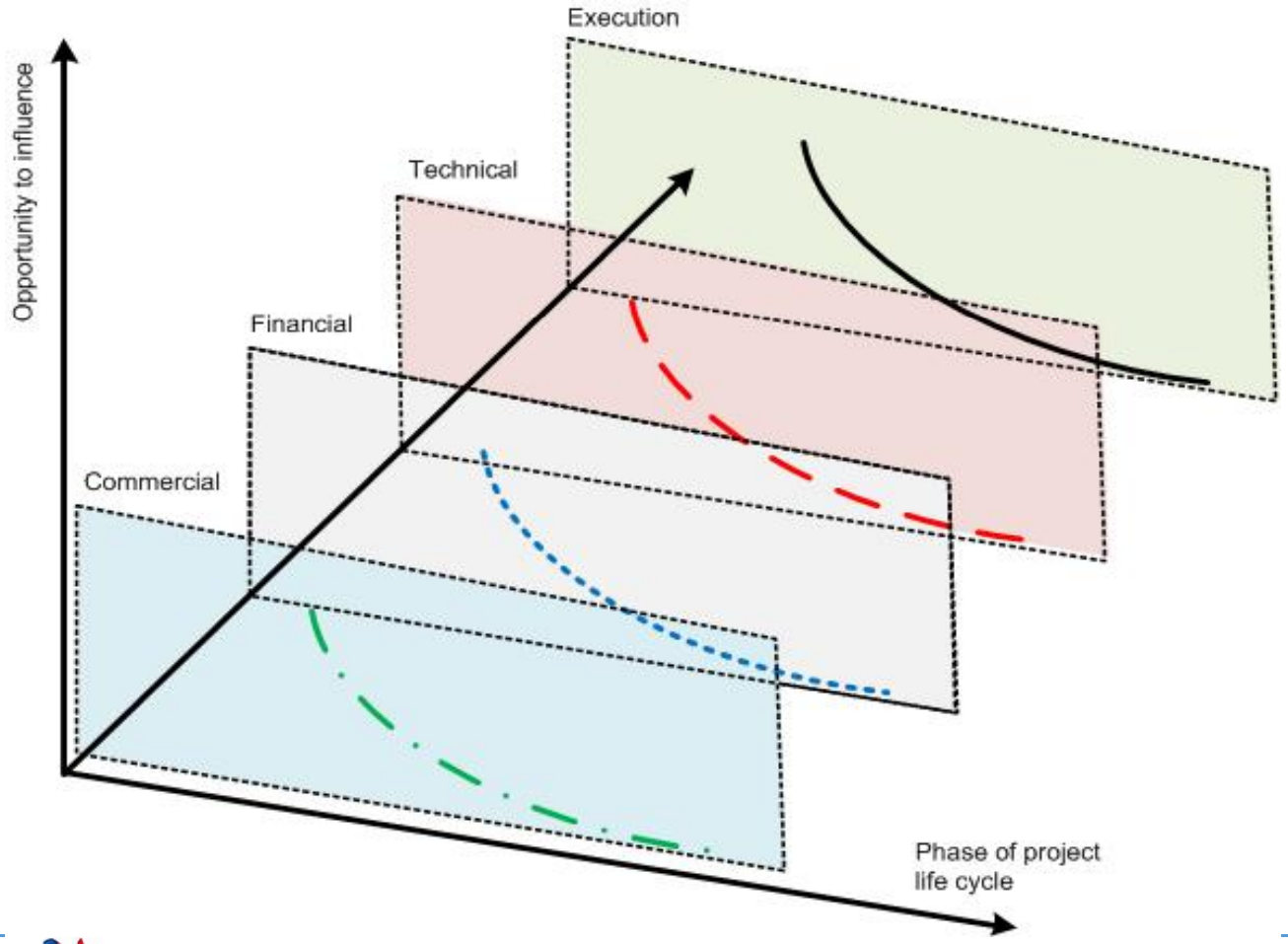
UNIVERSITY OF CALGARY

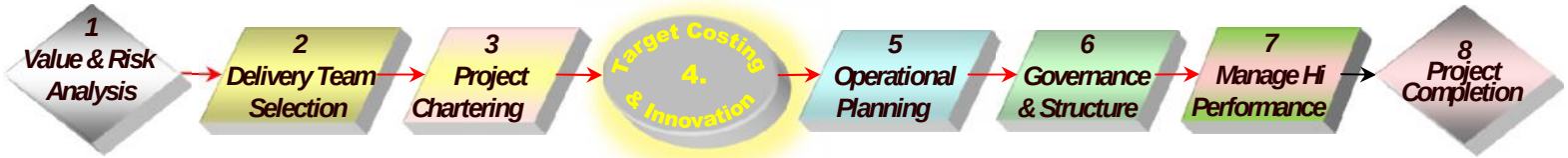


Step 4.1 Holistic Risk Analysis

The Four Planes of Projects

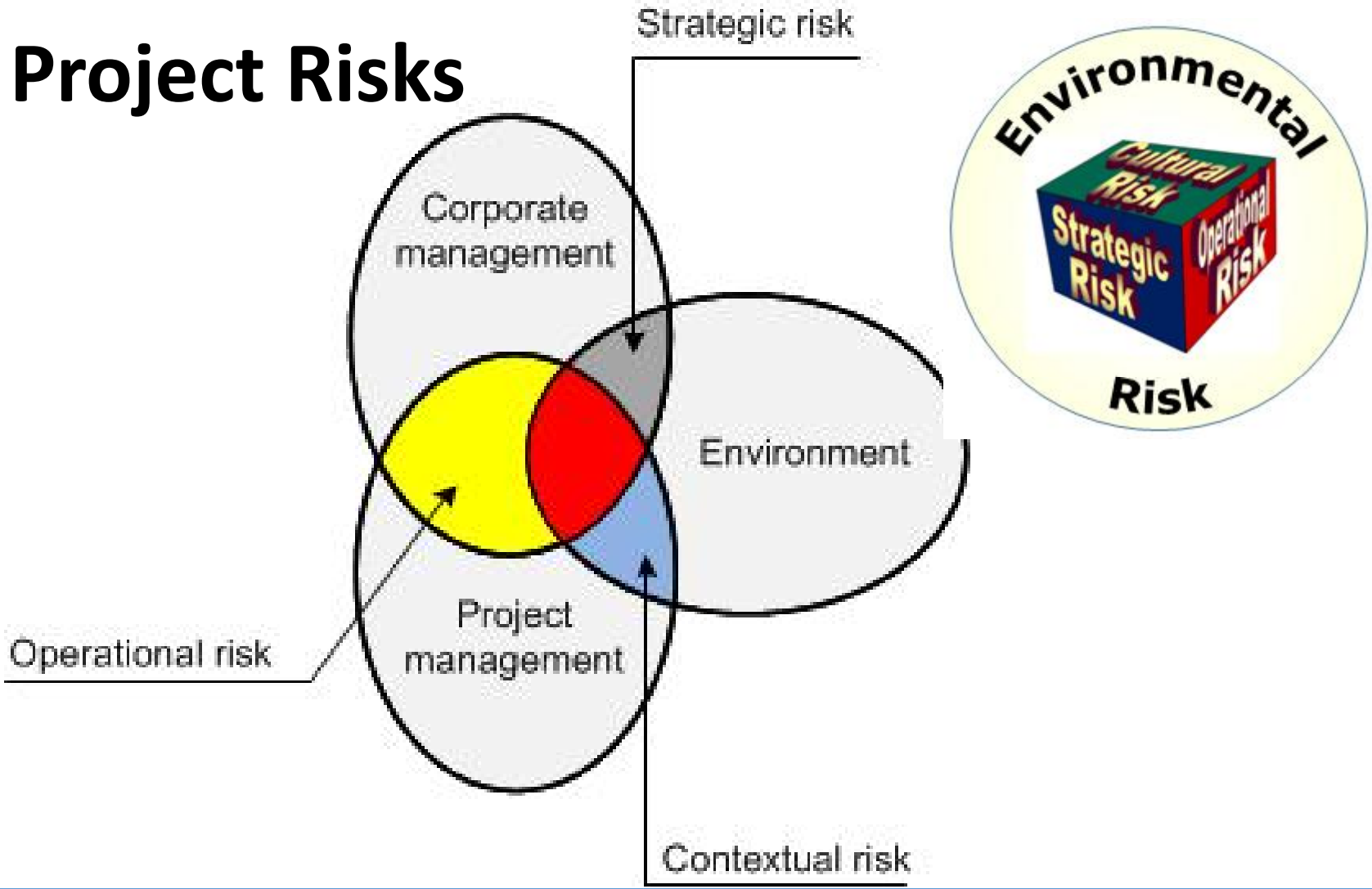
- Activities on each plane are impacted by the other planes

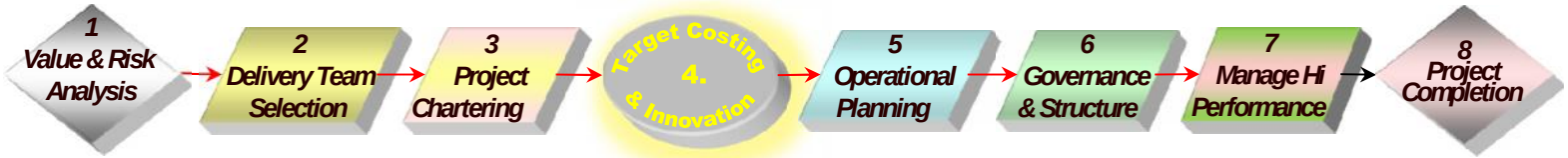




Step 4.1 Holistic Risk Analysis

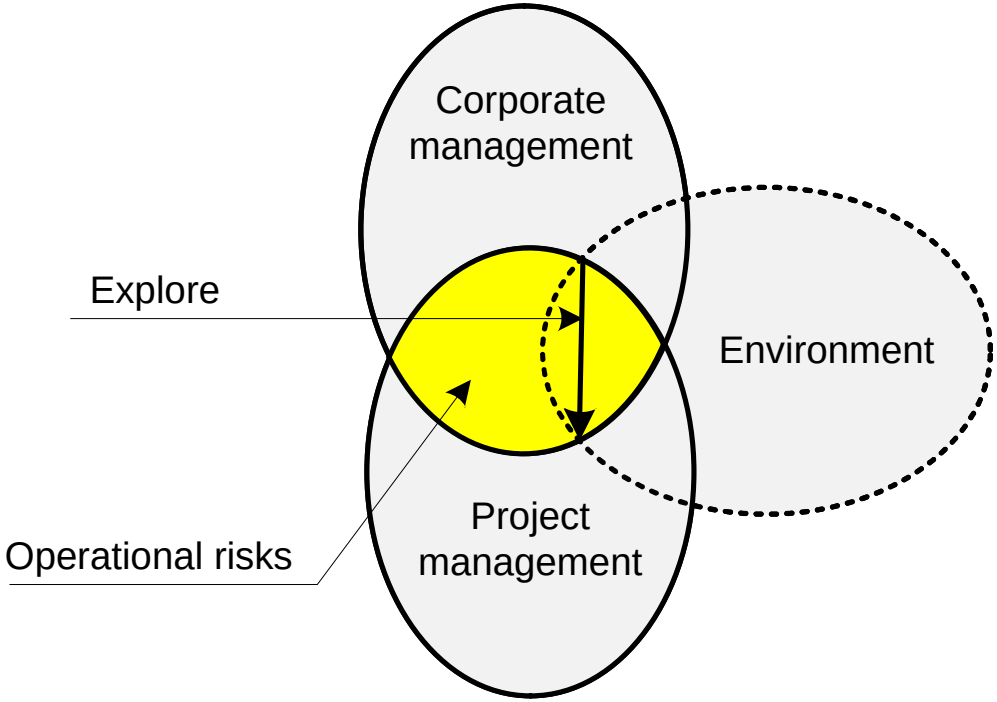
Project Risks



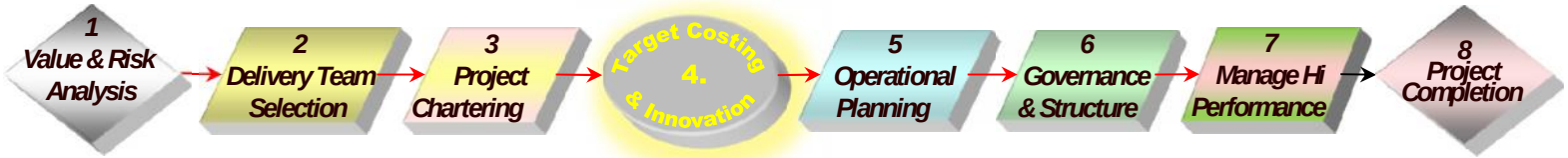


Step 4.1 Holistic Risk Analysis

Operational (Project) Risks

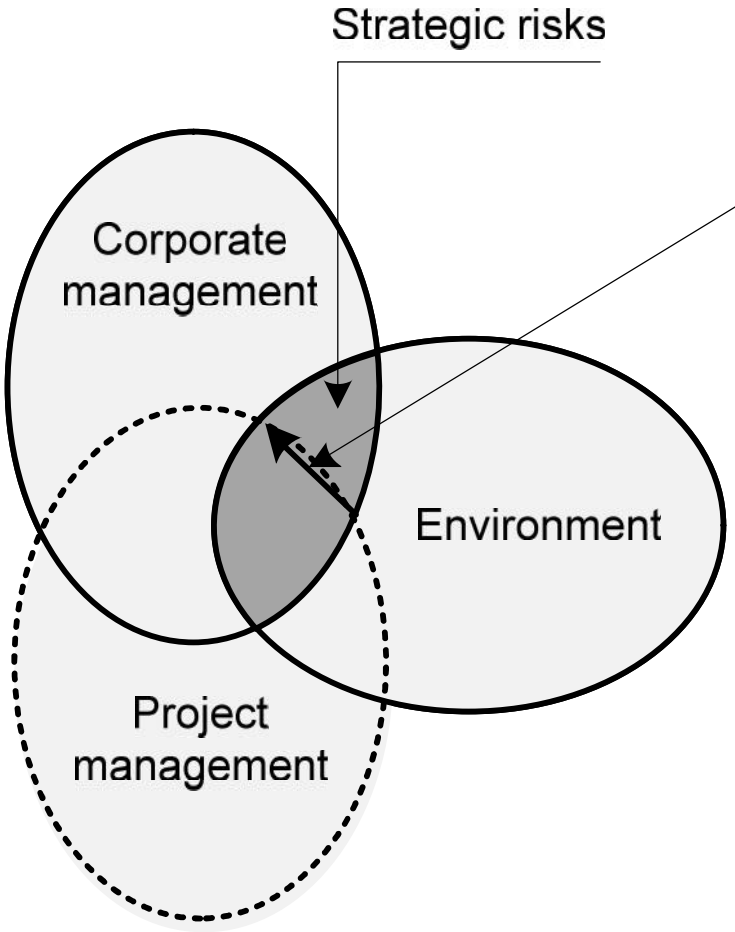


- Availability of resources
- Efficiency/productivity
- Timeliness
- Operability
- HSSE
- Site related risks
- Normal logistics risks



Step 4.1 Holistic Risk Analysis

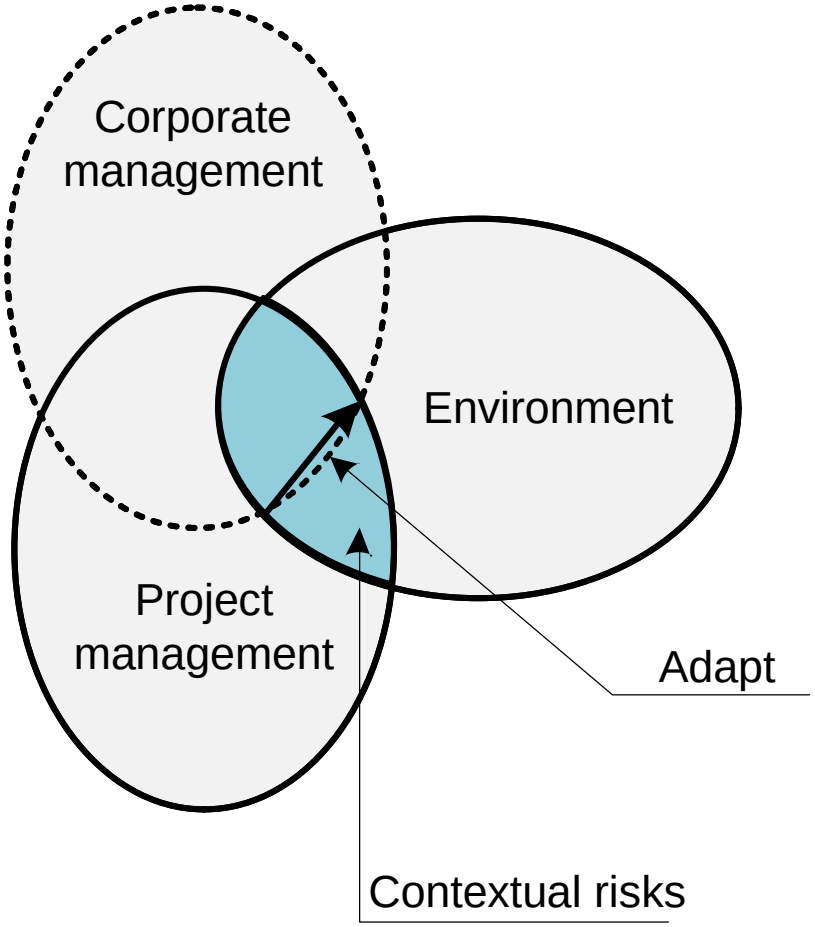
Strategic (Enterprise) Risks



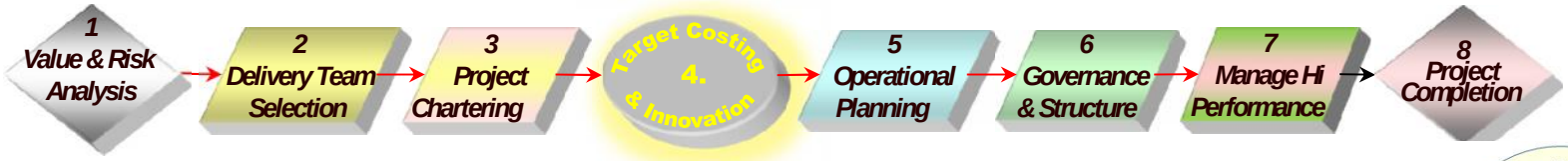
- ❖Maturity at project sanction
- ❖The project execution strategy
- ❖Changes to project objectives
- ❖Acceptance of project business risk exposure
- ❖Organizational Alignment
- ❖JV issues

Step 4.1 Holistic Risk Analysis

Contextual (Global) Risks



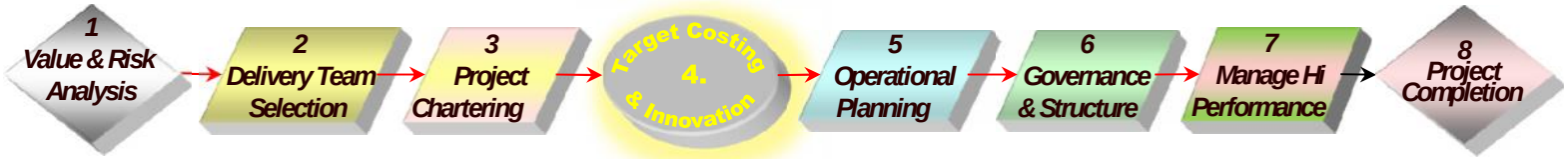
- ❖Project location
- ❖Market conditions
- ❖Geopolitics
- ❖Public opposition



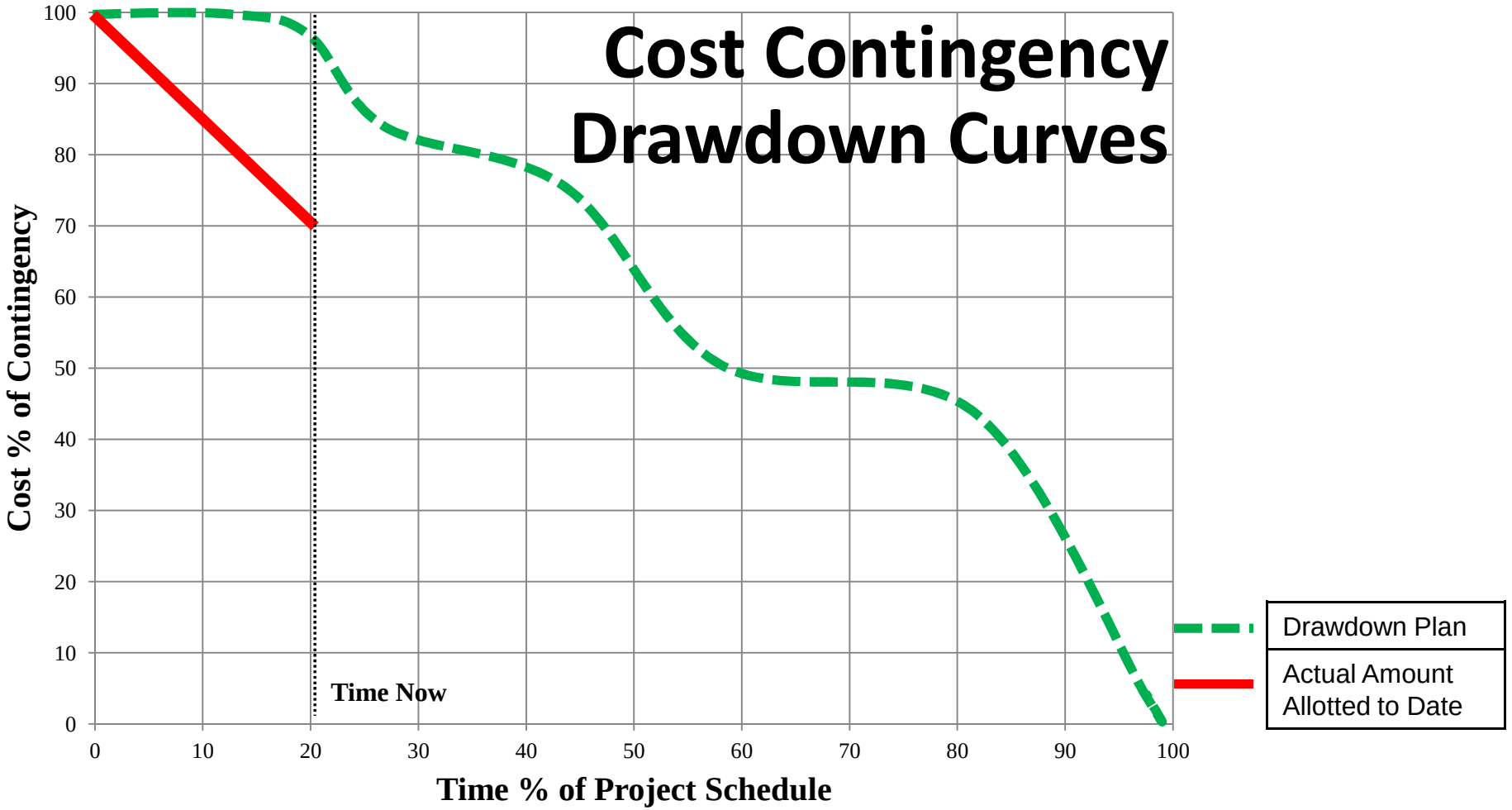
Step 4.1 Holistic Risk Analysis

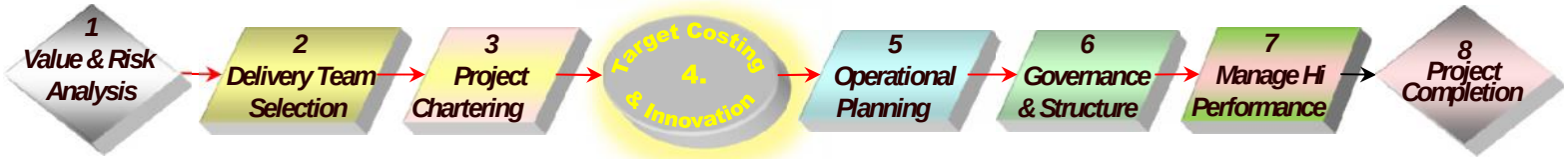
Three (Four) Buckets for Project Risks

- **Contingency**: for the Operational Risks
- **Scope Allowance**: for the Strategic Risks
- **Management Reserve**: for the Contextual Risks
- **Leadership & Teamwork**: for the Cultural Risks



Step 4.1 Holistic Risk Analysis

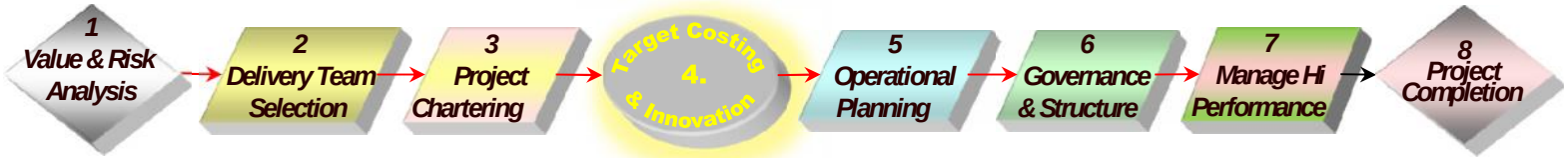




Step 4.1 Holistic Risk Analysis

Identify Risks

- Each project will have its own risks
- Helps think through the project process and issues associated with execution
- Identifies resource needs
- Identifies potential delays and the impact of these delays
- Potential cost overruns can be predicted and resolved
- What could go wrong (harm, loss, opportunities and threats)
  - Internal and external risks
  - Sources of risk: product, technology, people (misunderstandings, skills), project management etc.



Step 4.1 Holistic Risk Analysis

Prioritize the Risks

Impact on Project	Low	Med	High
High	Perhaps Respond	Respond	Must Respond!
Med	Perhaps Respond	Probably Respond	Respond
Low	Probably Accept	Perhaps Respond	Perhaps Respond

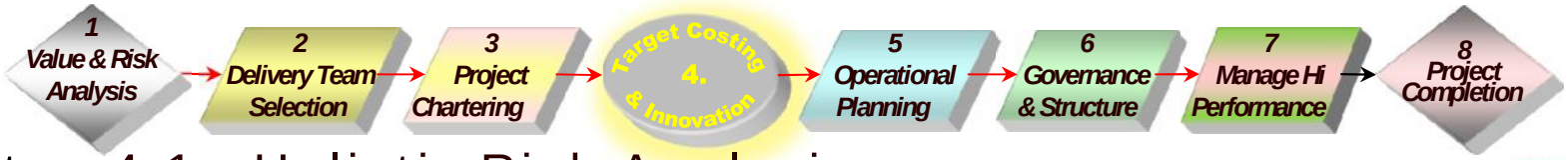
Likelihood of Occurrence

RISK MANAGEMENT TEMPLATE

C/U = Controllable/Uncontrollable

Probability: H. = High
M. = Medium
L. = Low

No.	**RISK** Description	**C/U**	**PROBABILITY** H.	M.	L.	**IMPACT** $	Time	**RISK MITIGATION** (add Actions to timeline) Action 1	Action 2

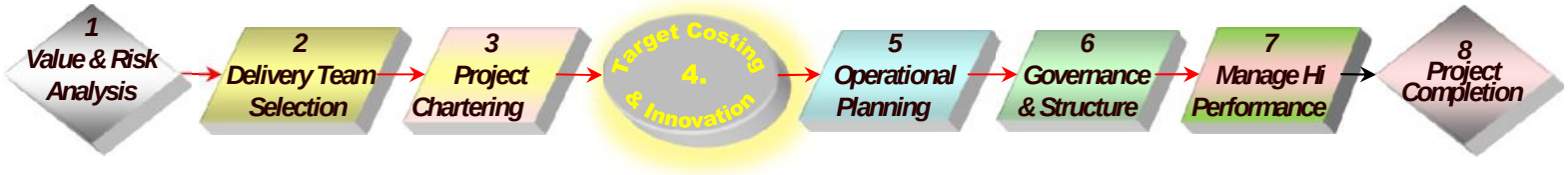


Step 4.1 Holistic Risk Analysis

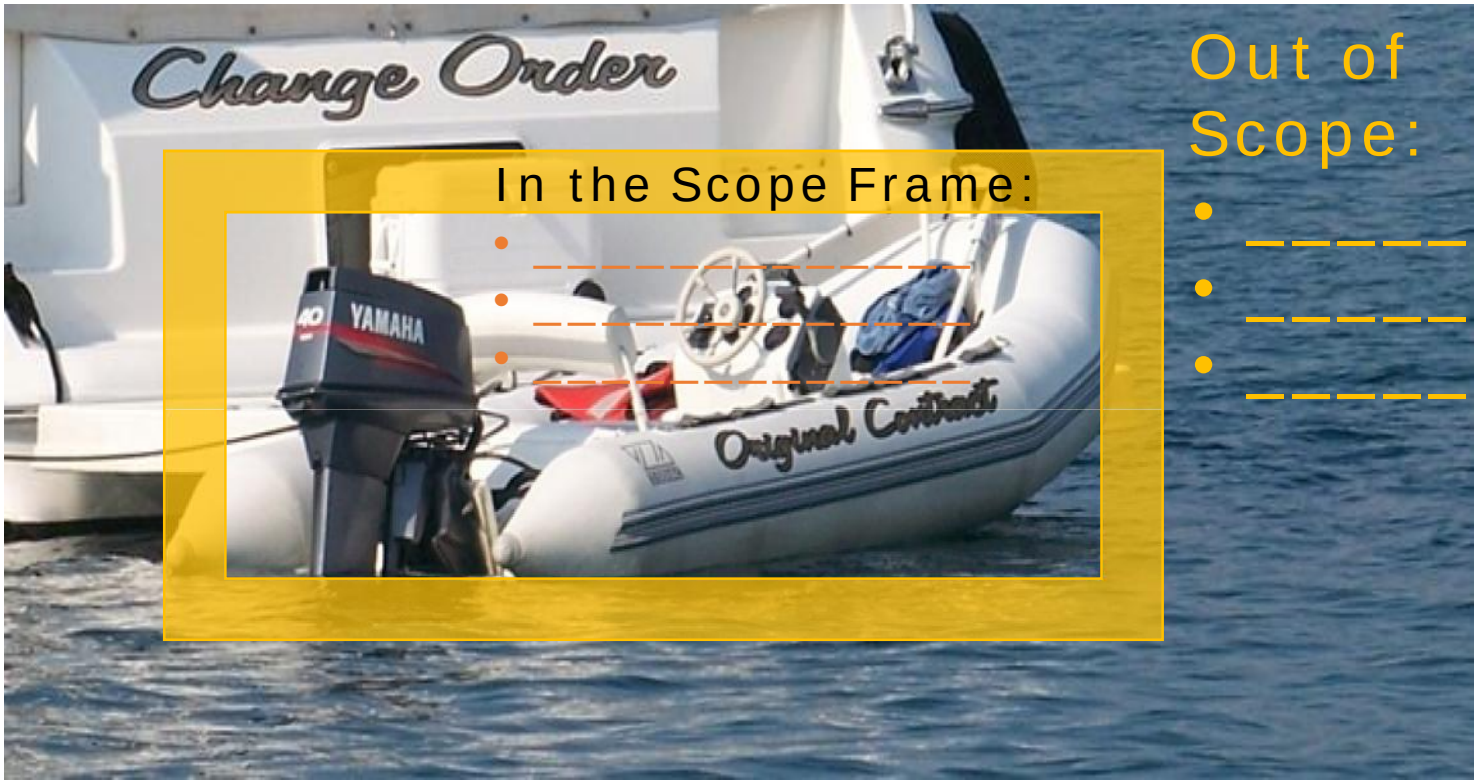
Risks - Example

The following identifies some of the Project Risks and external issues that could have an impact on this project:

1. Water
2. Flood
3. Ground water and environmental issues
4. ESC
5. Team support for meeting Milestones
6. Materials and manpower availability
7. On budget and on time
8. Achieving quality work
   - Checks made
   - QA/QC
9. Staff continuity (Warren and Bill)

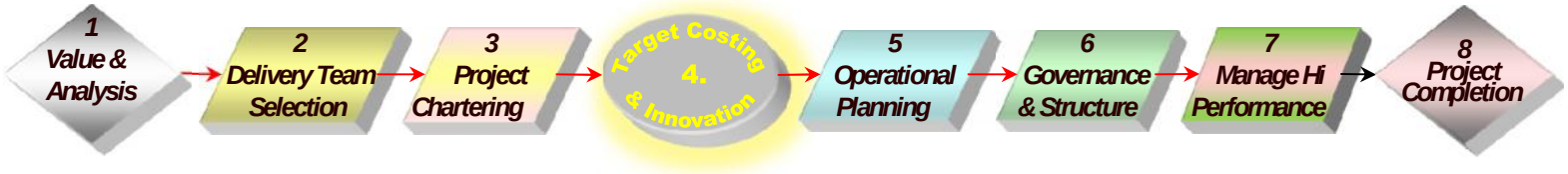


Step 4.2 Project Scope – Defining Boundaries



Identify Assumptions Made to Determine Scope, Schedule, or Cost:

- _____
- _____
- _____

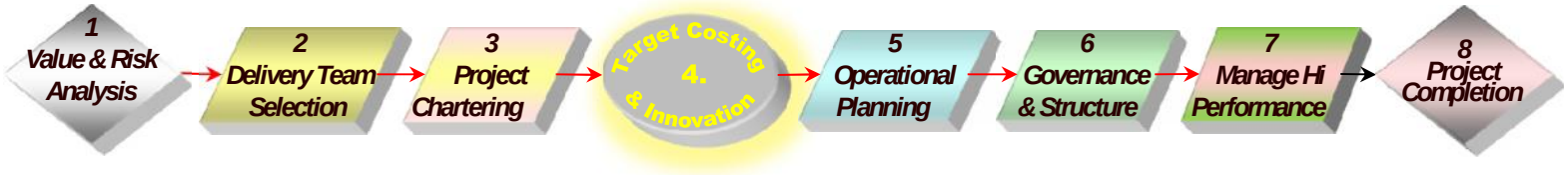


Step 4.3 Key Factors for Success

Examples

- Timely delivery of material.
- Good construction practices.
  - Within tolerance
  - Timely decisions
  - Clear understanding of schedule requirements
- Meeting Milestones.
  - North abutment before December 25, 2009.
  - North fill mid-January
  - Girder erection by March 29
  - Deck pour by May 19
- Strict compliance with safety requirements.
  – No loss-time accidents
- Strict compliance with environmental requirements.
- Timely communication of construction activity.
  - On Time – Complete project within contract schedule dates or better
  - Within Budget
  - Quality – Work constructed to Town or applicable standards

- High Performance Culture
  - Trust
  - Leadership
  - Teamwork
  - No Blame
  - Innovation
  - Team Satisfaction
  - Timely resolution of any issue/disputes
- Operational
  - Response Times
  - Supply Chains
  - Rapid Decision making
  - Integration with Engineering
  - Common Processes
  - Coordination with Subcontractors
  - No Rework



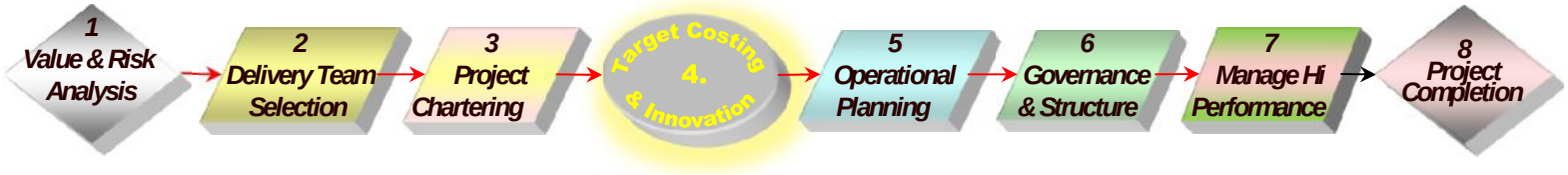
Step 4.3 Key Factors for Success

Task: Identify Key Factors for Success & how each is to be sustained:

- **How will we know if we are successful? Or How can this project fail?**
- **List the factors that are essential to achievement of the success criteria.**
- **List the criteria that will be used to measure the success of the project.**

1. _____
2. _____
3. _____
4. _____
5. _____
6. _____

- If a Critical Success Factor is not achieved the success criteria will not be achieved.
- If mitigation strategies can be put in place the issue is not a critical success factor.



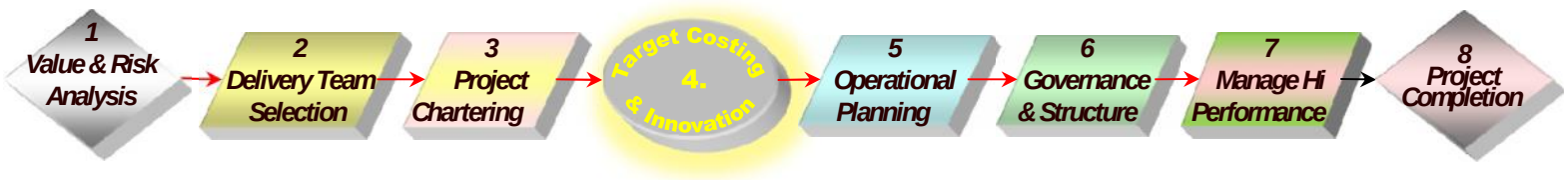
Step 4.4 Supply Chain Analysis

- Supply Chains are a critical factor in both Value, Quality, Cost, and Logistics
- What must be done to ensure that the project does not go over time or over budget because of Supply Chain issues?
- Where are the bottlenecks? Breakdown points?

_____

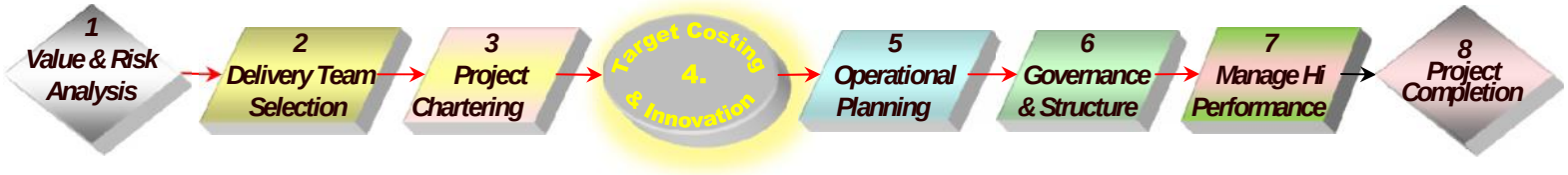
_____

_____



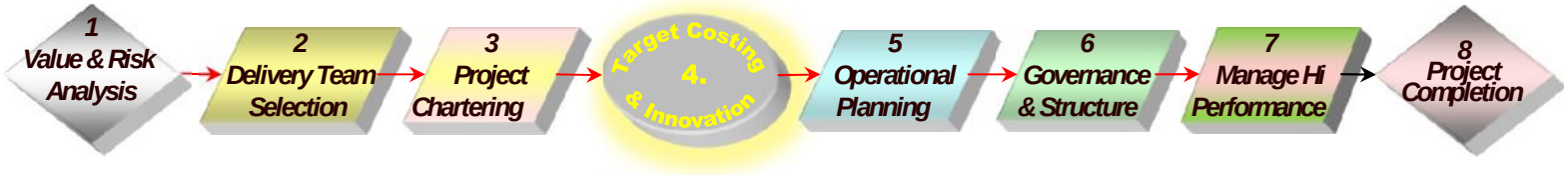
Step 4.5 Innovation Priorities

- What kinds/types of Innovation should be given the High Priorities?
  - Technical
  - Engineering
  - Supply Chain
  - Process Flow
  - Value Creation
  - Scheduling & Budgeting
  - Training
  - Safety
  - Cost Management
  - Lean Management
  - Coordination/Cross Functional Integration
  - Etc. Etc.



Step 4.6 Target Costing Interaction

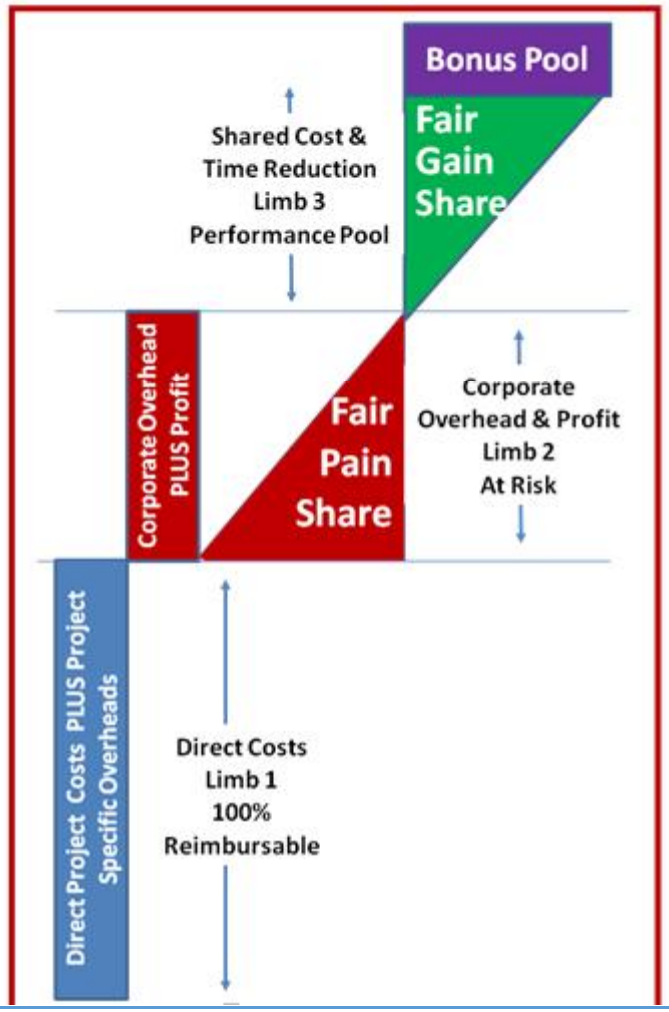
- **Target Costing Estimates are used as a basis for designing an operational plan in the next phase.**
- **Target Costing is an exercise in Collaborative Innovation**
- **Given All that you know so far:**
  - **Without Jeopardizing the Schedule**
  - **Without Reducing Your Profit Margins**
  - **Without Risking Safety or Standards of Excellence.....**
- ✓ **How would you cut costs by 15% (or more)?**
  - _____
  - _____
  - _____

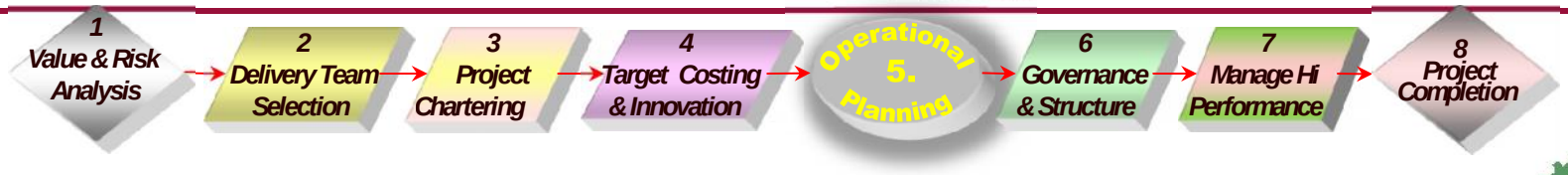


Step 4.7 Risk-Reward Framework

If Costs could be reduced significantly,

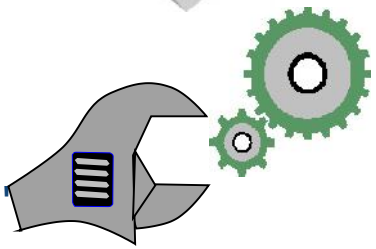
would a Risk-Reward model be appropriate for this project?





Step 5. Operational Planning

Co-CREATING the "ONE TEAM" OPERATION PLAN



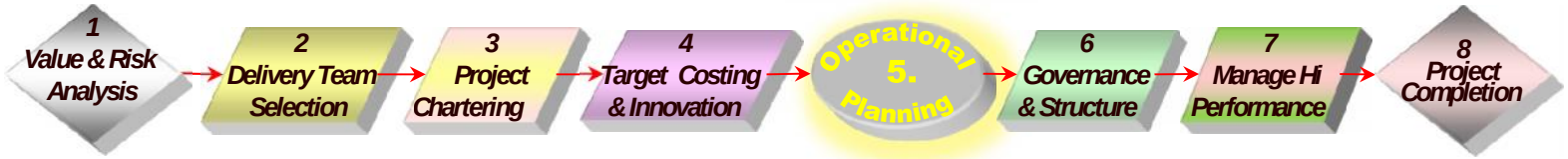
"I thought my partner was responsible for that!"

- ✓Establish Precise Needs & Requirements
- ✓Ask the Tough Operational Questions
- ✓Build Manager's Commitment
- ✓Determine if Strategy Makes Sense when Converted to Day-to-Day Operations

Work Plan

Create a Responsibility Chart

- Determine who has:
  - **Responsibility**
  - **Control**
  - **Leadership**
  - **Authority**
  - **Accountability**
  - **Plays Support Roles**
  - **Must be informed**
  - **Competency**
- Coordination & Business Integration Plan
  - **Program Roll-out**
  - **Seamless Customer Support**
- Anticipate Breakdowns
  - **These are normal, but should not remain for long**
  - **Turn Breakdowns into Breakthroughs**
- Outline Essential Tasks
  - **Fundamental Goals**
  - **Key Tasks**
  - **Essential Milestones**
  - **Critical Interfaces**
- Risks & Resource Commitments
- Examine Process Flows
  - **How it works Now**
  - **How it must work in the Future**
  - **Create Fast Time Processes**



5. Operational Planning

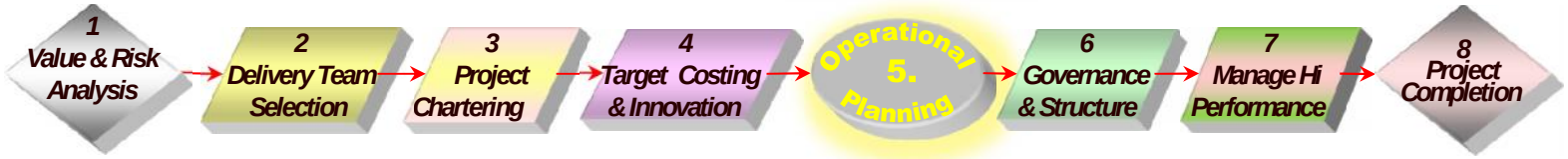
Co-CREATING the "ONE TEAM" OPERATION PLAN

❖ Key Steps

- ➢ 5.1 Cross Functional Integration
- ➢ 5.2 Interface Management
- ➢ 5.3 Breakdown Analysis
- ➢ 5.4 Early Warning System
- ➢ 5.5 Responsibilities & Roles
- ➢ 5.6 Fastime Processes
- ➢ 5.7 Protocols & Control
- ➢ 5.8 Resource Allocation
- ➢ 5.9 Supply Chain Integration
- ➢ 5.10 High Level Project Launch Plan
- ➢ 5.11 Risk-Reward Adjustment

Divide into Cross Functional Teams

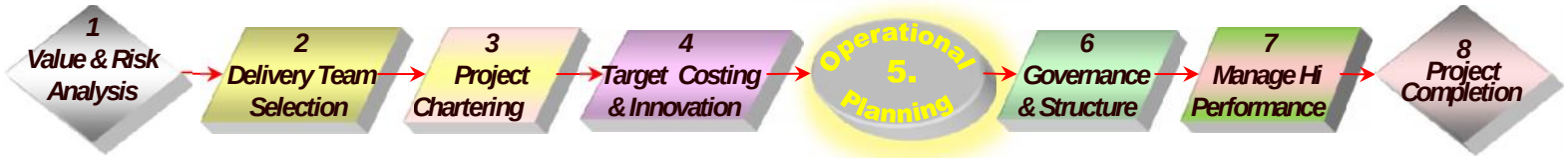
- Each Team Address Steps 5.1-5.9



Steps 5.1-5.9 Operational Planning (create Cross Functional Teams for this Exercise)

STRESS TEST: Your Task is to ensure each of these issues are addressed as key factors in the Project Launch Plan

- **5.1** Cross Functional Integration – How must each separate organization/function connect to make a seamless flow of information and work streams? (secondment, co-location, liaisons, lean systems, etc.)
- **5.2** Interface Management – this is the point where the majority of breakdowns occur. How must we ensure the interconnections across functional boundaries work effectively?
- **5.3** Breakdown Analysis -- What Breakdowns can you Expect to Occur? How should we/you turn these breakdowns into breakthroughs? What unexpected events should we be anticipating?
- **5.4** Early Warning System -- What Early Warning Signals would tell you the Breakdown is Beginning? How should people Respond to the Early Warning Signals?
- **5.5** Responsibilities & Roles -- Create Big Picture Task Chart with Roles & Responsibilities
- **5.6** Fastime Processes – What processes will ensure Fastime Performance? (ie. Rapid Decision Making, Pull-In Scheduling, Hot Lines, Engineering Integration, Reporting, Supplier Engagement, etc.)
- **5.7** Protocols & Control – What protocols & Controls promote productivity and rapidity?
- **5.8** Resource Allocation – Where will there be resource constraints? How should they be avoided?
- **5.9** Supply Chain Integration – What needs to be done to ensure on-time, quality delivery every time?



❖Key Steps

- ➢ 5.10 High Level Project Launch Plan
- ➢ 5.11 Risk-Reward Adjustment

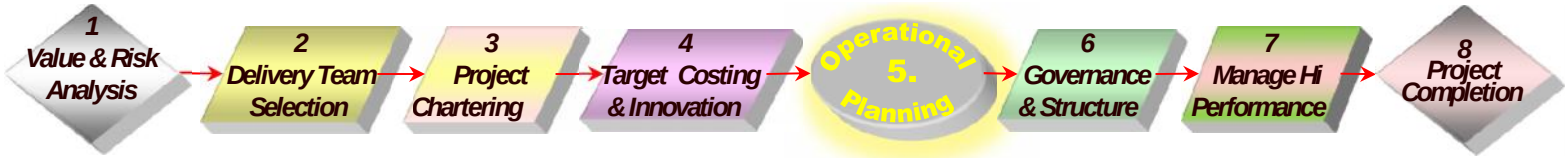
Divide into Four Teams

Team A: Step 5.10 – Develop High Level Project Launch Plan
- One member from each of the previous Cross Functional Teams
- Create Milestone Target Dates & Probabilities

Team B: Step 5.10 – Develop Project Organizational Structure
- One member from each of the previous Cross Functional Teams
- Roles & Responsibilities
- Structure
- Stakeholder Engagement

Team C: Step 5.10 – Develop Budget
- One member from each of the previous Cross Functional Teams
- Create a Budget for Each Phase of the Project

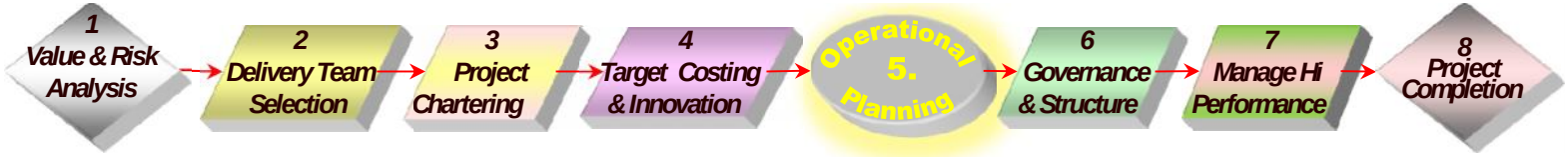
Team D: Step 5.11 – Risk-Reward Adjustment
- One member from each of the previous Cross Functional Teams
- Reevaluate Risk Profile based on Steps 5.1-5.9



Step 5.10 High Level Project Launch Plan

❖Team A: Provide target dated for major Milestones

Milestone	Date	Probability



Step 5.10 High Level Project Launch Plan Major Milestones

Milestone Analysis			
Schedule Milestone	Required Date	Likelihood Date Can Be Met (High,Med,Low)	Discussion of Assumptions, Constraints, Risks, Issues, Criticality, etc.

Step 5.10 High Level Project Launch Plan

Team B: Project Organization

1. Project Structure

Develop a diagram illustrating the various internal/external resources and their roles for the implementation phase or the next phase.

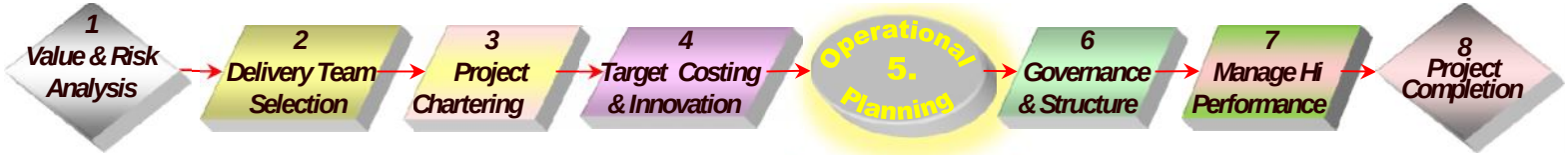
2. Roles & Responsibilities Chart

Who has what roles, who relates to whom, who makes decisions, etc.

3. Stakeholders

Groups or individuals who have vested interest in the process or outcome.

- Affected by the project
- Can affect your success
- Roles must be identified at the start of the project
- Needs and expectations must be communicated and influenced



Step 5.10 High Level Project Launch Plan
Project Organization

Fed & Prov Gov't's

Town Council

Citizens

Town of Okotoks
Marley O.
Jamie G

Burnco
Telus
Fortis
ATCO
CPR
AENV
DFO
Env. Groups

Mesken

ISL

Graham

Rob Laliberty

Cal McClary
Mario Prezelj

Bill Campbell

Jason Russell

Ryan Anderson

Jim Hanley
Syed Iqbal

Chris Schwartz

Warren Baun

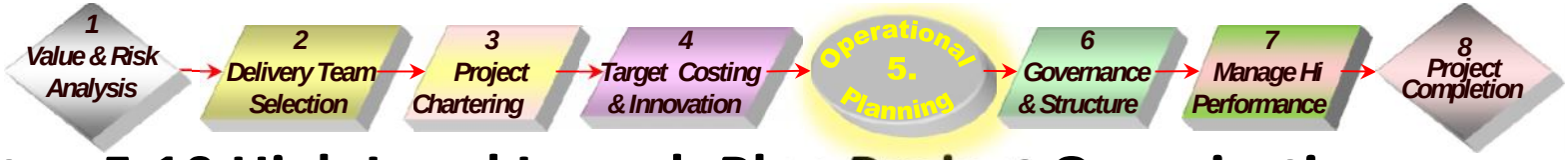
SUBS

Bill Riecken
Mike Mullen
Dave Gallic

SUBS

Bow Mark Paving
Sean McArthur
Trevor Forbes
Devon Green
Subs

Telus: Dan Kellendorfer
Fortis: Gord Hofer

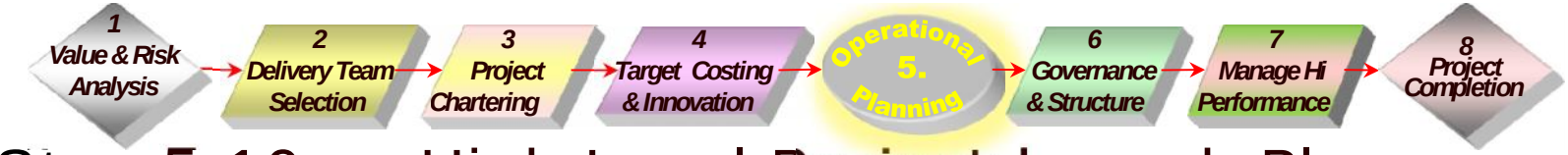


Step 5.10 High Level Launch Plan Project Organization Team C: Roles and Responsibilities

TASK	OWNER	SUPERIN'T MANAGER	PROJECT MANAGER	EXPERTS	FUNCTIONAL EXPERTS	BUSINESS ANALYSTS	DEVELOPERS
Statement of work	S/V	L	C	C	C	R	C
Needs Assessment	C	L	I	I	C	R	I
Project Management	I	L	R	C	C	C	C
Functional Design		L	C	C	C	R	C
Technical Design		C	L	C	C	C	R
Development		C	L	C	C	C	R
Integration testing		C	L	C	C	C	R
User testing		L	C	C	C	R	C
Deployment	I	L	R	R	R	R	I
Migration		C	L	R	I	I	
Risk Assessment & Management		L	R	C	C	C	C

L = LEADERSHIP/DIRECTION R = RESPONSIBLE FOR RESULTS C = CONSULTED/INPUT I = INFORMED S = SIGN OFF V = V ETO

- Understand the roles and responsibilities of each player.
- Read and understand your contract (RTFC!!!)



Step 5.10 High Level Project Launch Plan
Team B: Project Organization

STAKEHOLDER MANAGEMENT TEMPLATE

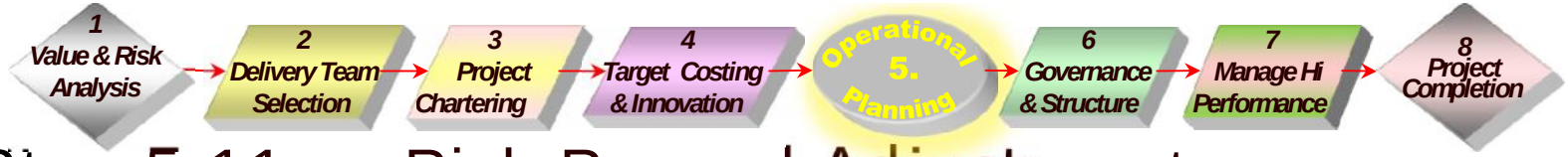
STAKEHOLDER	OBJECTIVES	How They Operate	Where They Gain Support	Their Impact	How to Manage Them: Action Plan (add Actions to timeline)

Step 5.10 High Level Project Launch Plan

Team C: Budget

- **Estimate only the phase(s) that is known at this time. If a ballpark estimate for the entire project is required, ask for help.**
- **The budget should be broken down at the high level illustrated in "Scope" section.**

Phase/Scope Component	Effort (Hours)	Cost
Total		



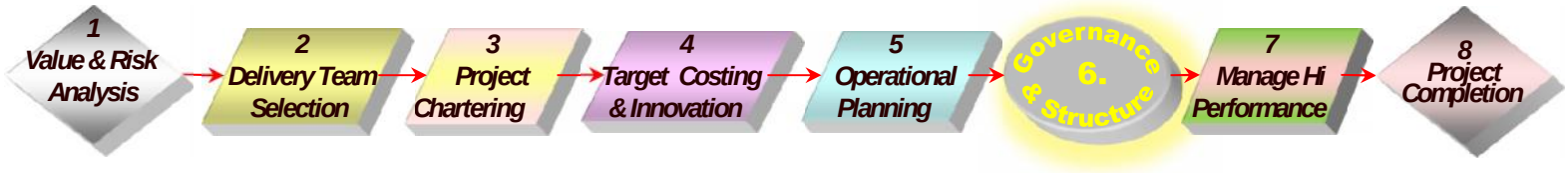
Step 5.11 Risk Reward Adjustment

Team D:

One member from each of the previous Cross Functional Teams

Reevaluate Risk Profile based on the outcomes from examining Steps 5.1-5.9

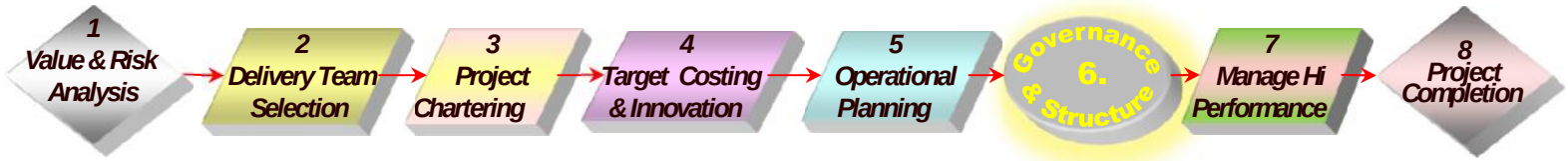
- **Given the Operational Planning, the Coordination, Breakdowns Possible, the Ambiguity and Uncertainty, do we need to readust our Risk Management approach?**
- **Focus on Operational and Cultural Risks**



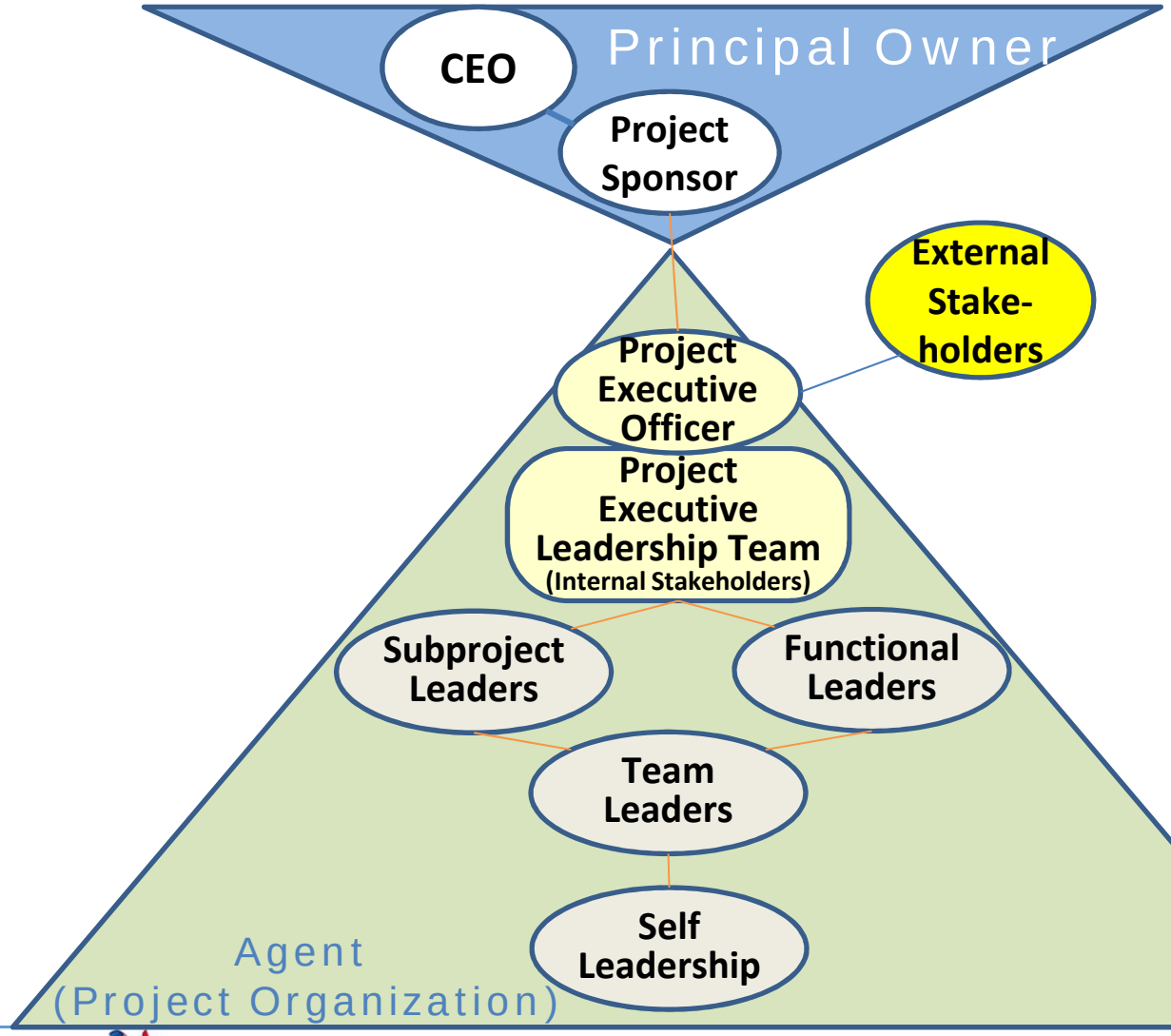
6. Governance & Structure

❖Key Steps

- 6.1 Project Governance & Leadership Team
- 6.2 Escalation & Issue Resolution
- 6.3 Ground Rules
- 6.3 Relationship Health Mgmt
- 6.5 Communications Plan
- 6.6 Commercial & Legal Terms
- 6.7 Realigment of Metrics & Rewards



Step 6.1 Project Governance & Leadership Team



Role of Project Executive Council

Policy
- Driven by Vision
- Ensure Focus of Strategy, Performance, Cost Control

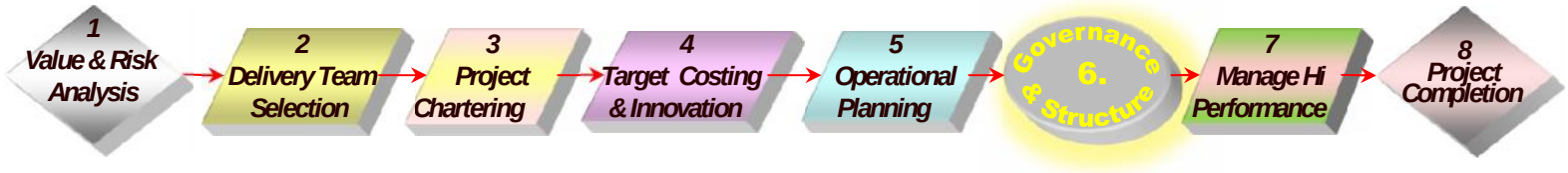
Processes
- Best Practices & Procedures
- Rapid Implementation

Pressure
- Downward Decision Making
- Focus on Results & On Time Delivery

Partner Relationships
- Cooperation & Synergy
- Prevent/Resolve Conflicts

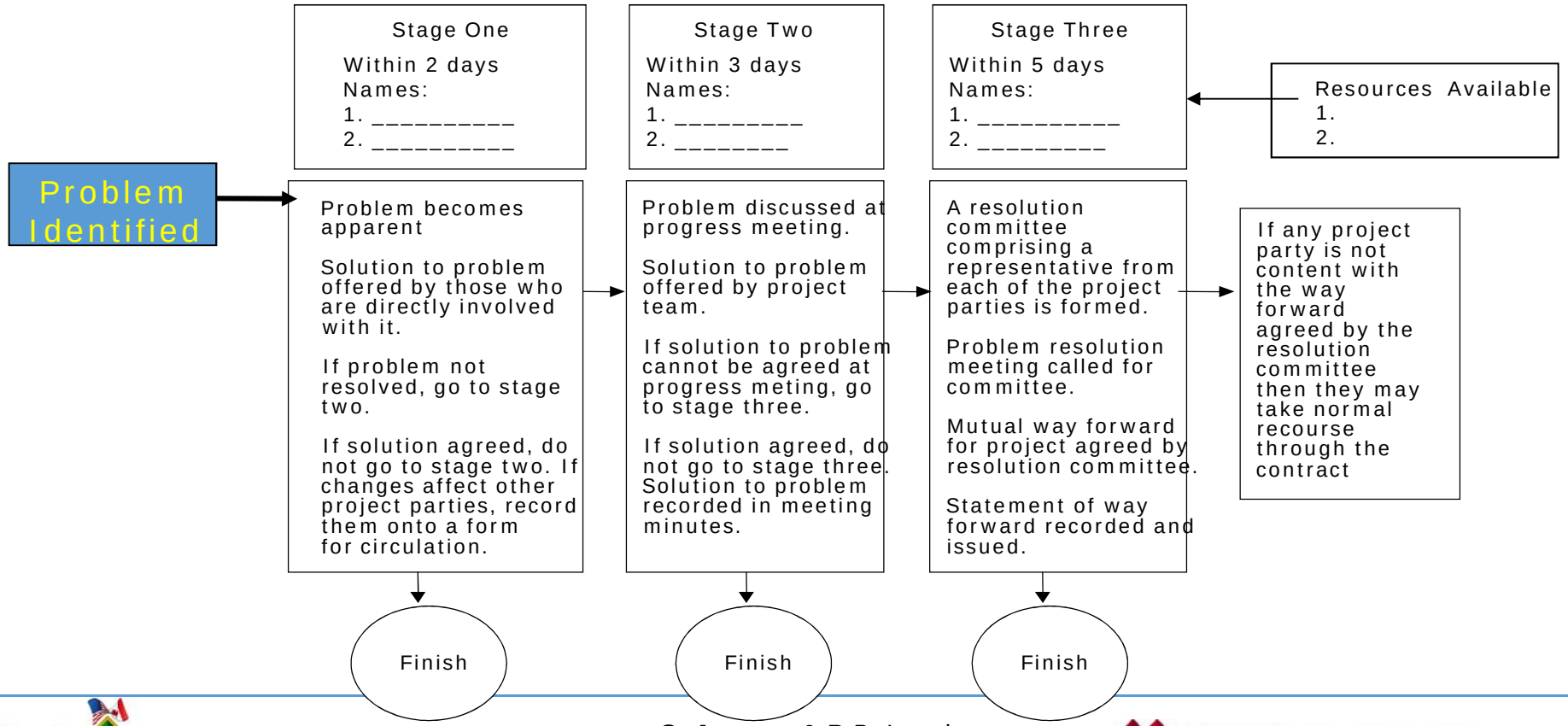
Productivity
- Ensure High Leverage of Integration Teams

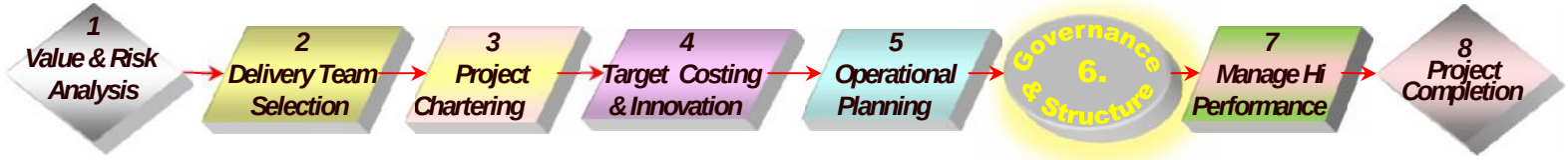
Problem Solving
- Escalation Process established to resolve Difficulties that cannot be resolved at Integration Team Level
- Resolve Conflicts before things get nasty



Step 6.2 Issue Escalation & Resolution Mechanism

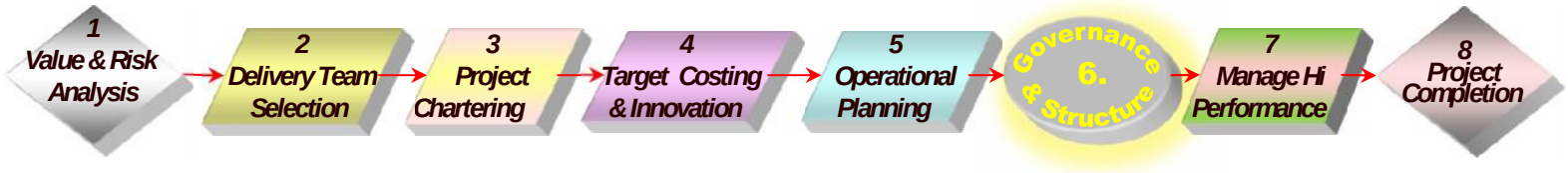
- **Lowest level with time limit**
- **Escalated to the next level of management**
- **No action is <u>not</u> an option**





Step 6.2 Issue Escalation & Resolution Mechanism

Issue becomes apparent	Stage One Within 2 days- At Site Level	Stage Two Within 3 days- At Project Engineer	Stage Three Within 5 days- At PM Level	Stage Four At corporate level with PEO
	Solution to issue offered by those who are directly involved with the issue. If solution agreed, advise team members of issue and the agreed solution. If issue not resolved, go to Stage Two.	Solution to issue offered by Project Engineers. Advise team members of issue and agreed solution. If solution to issue cannot be agreed to, go to Stage Three.	Solution to issue offered by Project Managers. Advise team members of issue and agreed solution. If solution cannot be found, PMs escalate problem to be resolved by designated senior management.	Solution to issue offered by the PEO and executives. If issue is not resolved at this level, any party may then take specified dispute recourse through the contract.



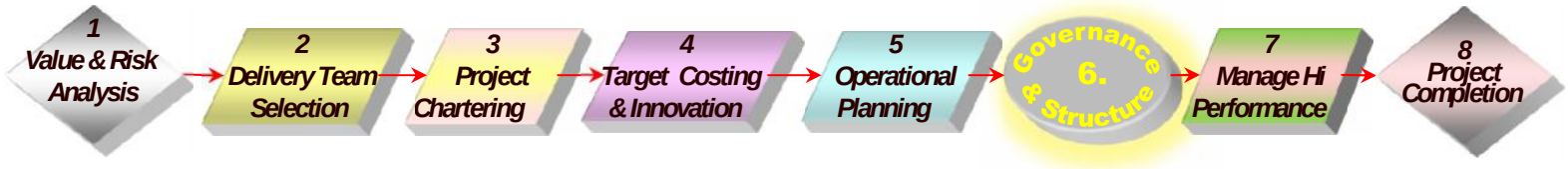
Step 6.2 Issue Escalation & Resolution Mechanism

Group:	A Immediate	B 5 days	C 5+ days
Site Level ⟺ Site Level	12 HR	1 day	5 days
PM Level ⟺ PM level	24 HR	2 days	5 days
Director ⟺ Director	24 HR	2 days	5-10 days
General Manager ⟺ CEO	24 HR		

A: Issue requires immediate or quick resolution.

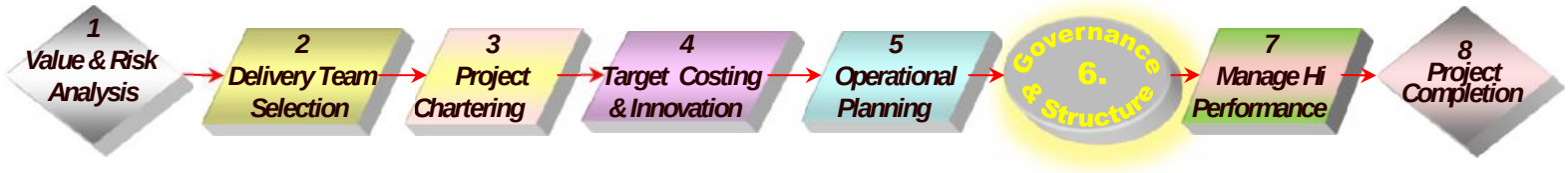
B: Issue can be resolved within 5 days with minimal impact

C: Issue can be resolved in greater than 5 days with minimal impact



Step 6.3 Ground Rules

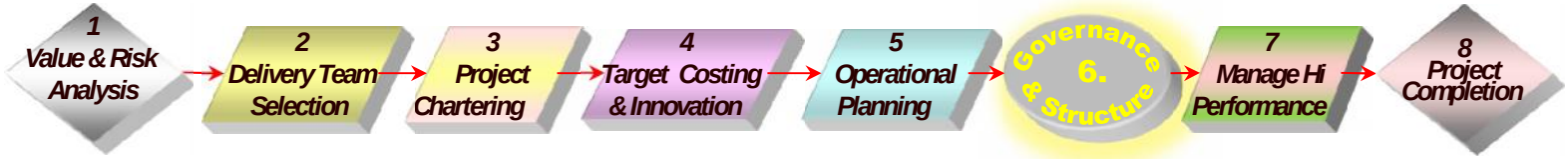
- **Mutually agreed standards of conduct and behaviour**
- **Purpose of Ground Rules**
  - To make sure everyone knows and agrees with what is expected of him or her
  - To have everyone agree on what's important to the team and what is appropriate behaviour
  - To express the values of the team
  - To help the team evaluate its performance
  - To help the team resolve conflicts
  - To help a new team member know what's expected of him or her.
- **Ground Rules are meaningless unless all members buy into and actively live them**



Step 6.3 Ground Rules –Example

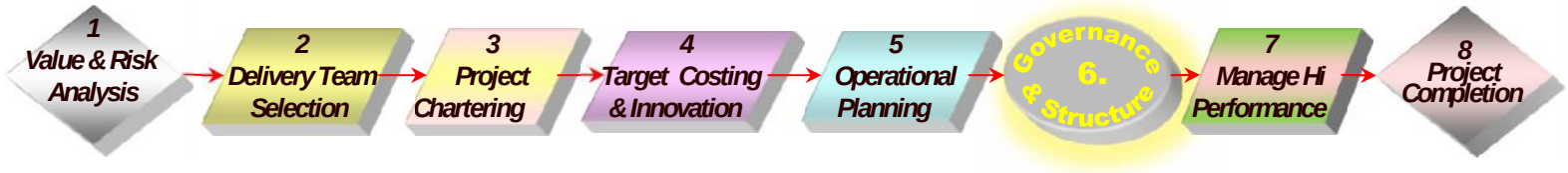
The following Ground Rules were agreed to:

- If response is urgent, say when - if timeline is not possible, say so and establish a reasonable timeline;
- Key decisions – document and share them within 3 days (aids communication and defines future change);
- Meetings – every 3 weeks: agenda provided in advance (2 days); meeting minutes sent out within 1 week by ISL;
- Open communication – include the PM in project correspondence;
- Respect decisions once made – leave disagreements at the door; trust and personal respect
- Everyone shares responsibility and celebrates success;
- Don't let issues fester – speak up.



Step 6.3 Ground Rules

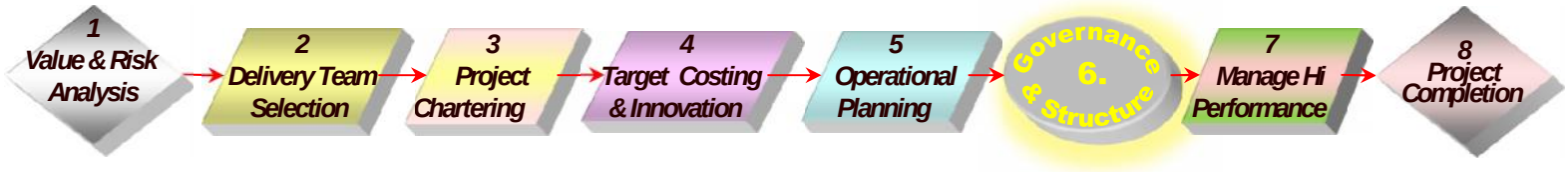
- What are our goals as a team? Our purpose?
- Are we clear on our roles and responsibilities?
- What are our expectations of the team? concerns? hopes? commitments?
- What do others expect of us?
- What is our process for making decision?
- Communication: what, when, why, with whom?
- Meetings – how often, how long, agenda, chair, minutes?
- How do we measure our performance and share feedback?
- How de we handle conflicts and resolve problems?
- How do we prioritize work? Handle time constraints?
- How do we self-correct? How do we follow-up on obligations?
- What kind of climate do we want in our team? How do we achieve that?
- What other guidelines are important for us/ informing each other, scheduling, travel, recognition?



Step 6.3 Ground Rules: Instructions to Field Personnel

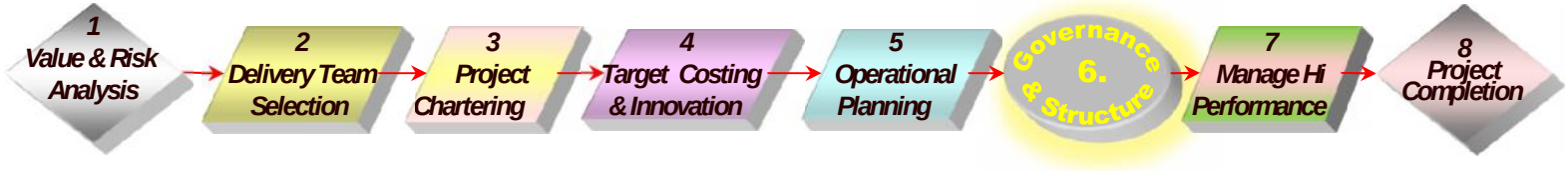
Basic policy

- Contractors to be present at meetings with subcontractors
- When dealing with contractor: be firm but fair
- Be a team member; avoid adversary relationship with contractor



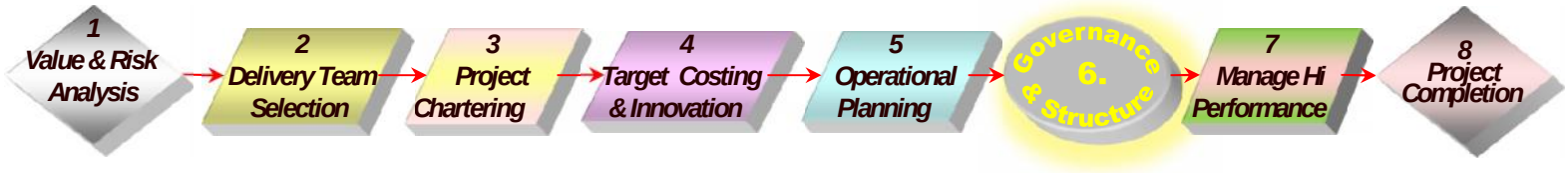
Step 6.3 Ground Rules: Instructions to Field Personnel

- **Inspections and tests to be made promptly**
- **Inspect the work as it progresses**
- **Avoid overly-literal specification interpretation**
- **No field change without PM approval**
- **Follow-up all required corrective work until completed**
- **Do NOT supervise any construction nor the contractor's personnel**
- **No authority to stop the work; notify PM if necessity arises**



Step 6.3 Ground Rules: Instructions to Field Personnel

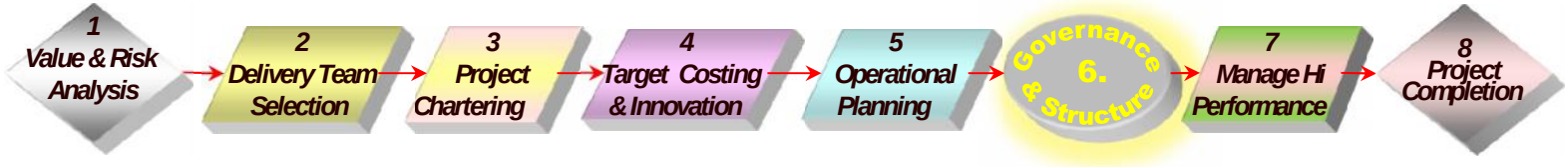
- **No authority to require quality exceeding that covered by the contract**
- **Document all actions taken**
- **Documentation**
  - **All field personnel must keep approved type diary**
  - **Contractor submittals to be documented both coming in and going out**
  - **Business telephone calls should be documented**
  - **Keep photographic records of progress**
  - **All orders to the contractor must be in writing**



Step 6.3 Ground Rules: Instructions to Field Personnel

Communications

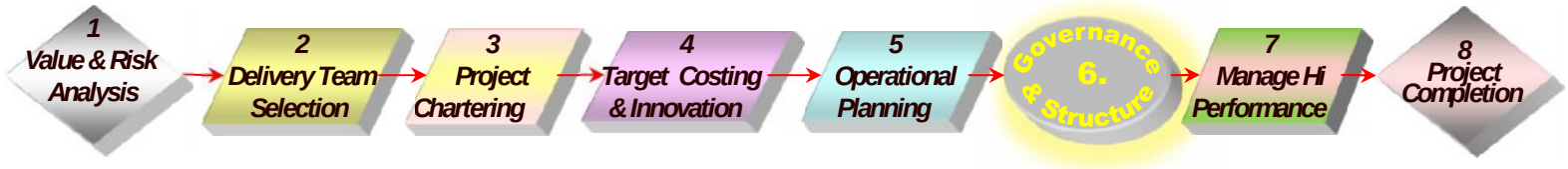
- **Contractor submittals handled only thru PM**
- **Surveys and special inspections requested thru PM**
- **Orders to contractor from ANY source must be submitted thru PM**



Step 6.3 Ground Rules: Instructions to Field Personnel

Changes

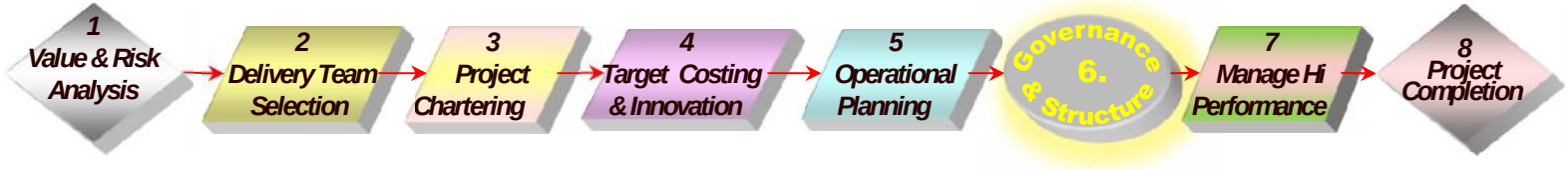
- **Field orders and change orders must be handled thru PM**
- **No changes on oral instructions without written confirmation**
- **No deviations from plans and specifications except by change order - even if no cost or time extension is involved**



Step 6.3 Ground Rules: Instructions to Field Personnel

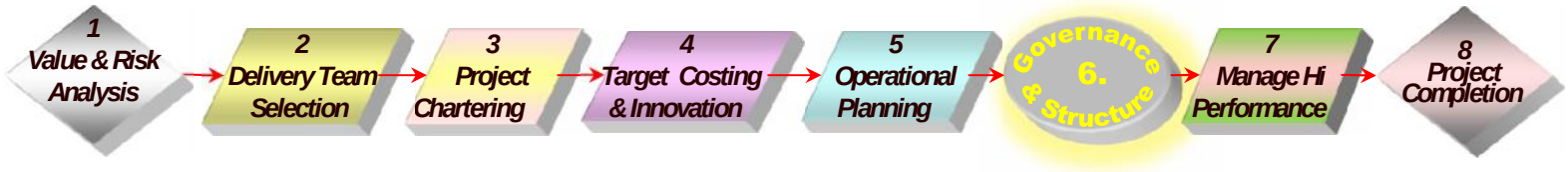
Other

- **All inspections should be at irregular intervals**
- **Inspector should be one of the first ones at the job and one of the last to leave**
- **Not a police officer**
  - **Contractor's prior experience**
  - **Lack of understanding of the design requirements**
- **Best Inspectors are Great Coaches**



Step 6.4 Health Check

- **List the criteria that will be used to:**
  - **Evaluate our performance and effectiveness**
    - **Both soft and hard issues**
    - _____
    - _____
    - _____
    - _____
    - _____
    - _____



Step 6.4 Health Check : **Monitoring Performance**

Date: Name: Firm:

COMMUNICATION				
1	Communications are…	difficult, guarded	1 2 3 4 5	open, up-front
2	Information flow is…	restricted	1 2 3 4 5	free, open
3	Timeliness of information is…	late	1 2 3 4 5	on-time
WORKING RELATIONSHIPS				
4	Cooperation between parties is…	poor, detached	1 2 3 4 5	good, unreserved
5	Issues and concerns are…	ignored	1 2 3 4 5	dealt with quickly
6	Responses to issues become…	personal	1 2 3 4 5	project problems
7	Disputes are addressed…	ineffectively	1 2 3 4 5	efficiently
8	Problems are resolved by…	senior management	1 2 3 4 5	lowest level
	TECHNICAL REQUIREMENTS			
9	Safety performance is…	not acceptable	1 2 3 4 5	acceptable
10	Overall quality is…	not acceptable	1 2 3 4 5	acceptable
11	Value for money is	not acceptable	1 2 3 4 5	acceptable
STAKEHOLDER & EXTERNAL ISSUES				
12	Public complaints are…	frequent	1 2 3 4 5	infrequent

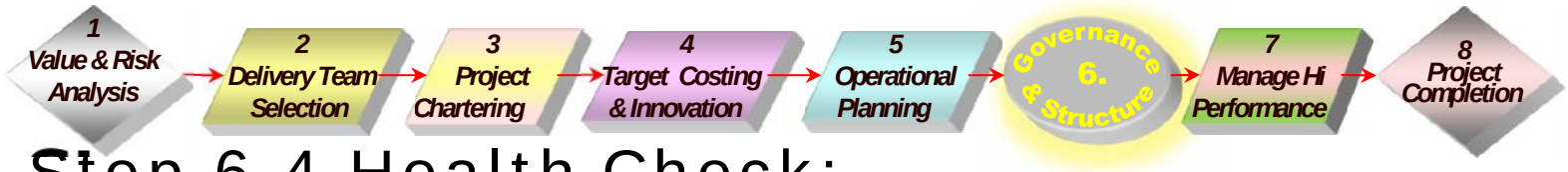
Please list examples for point 1 – 12 above that you rated 1 or 2

_____

_____

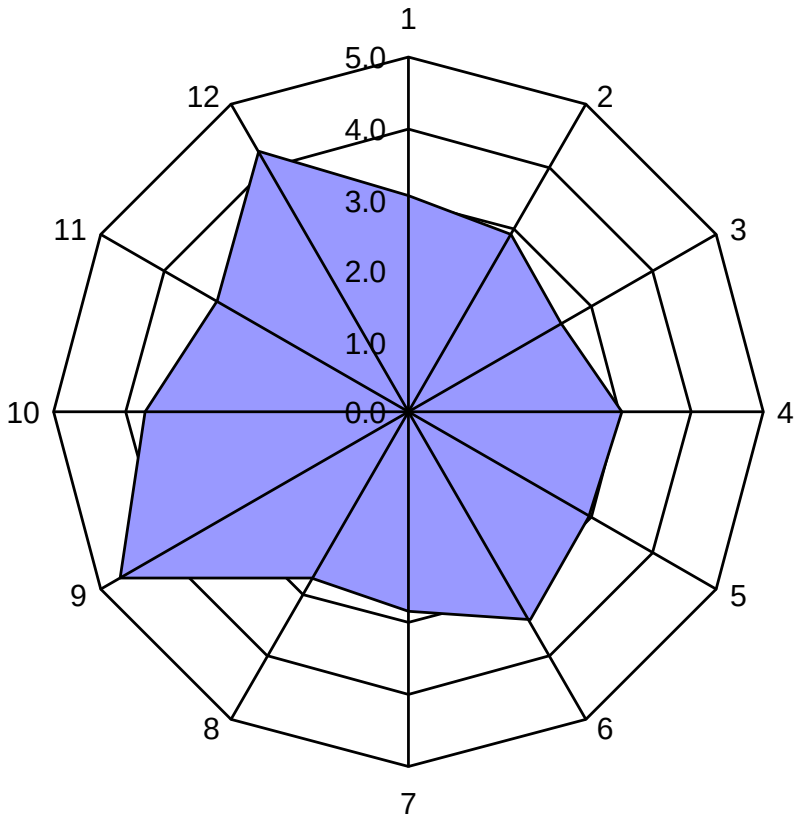
_____

_____

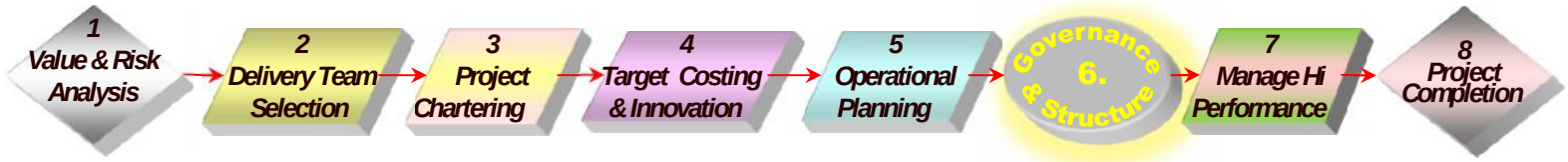


Step 6.4 Health Check: Team Alignment Overall

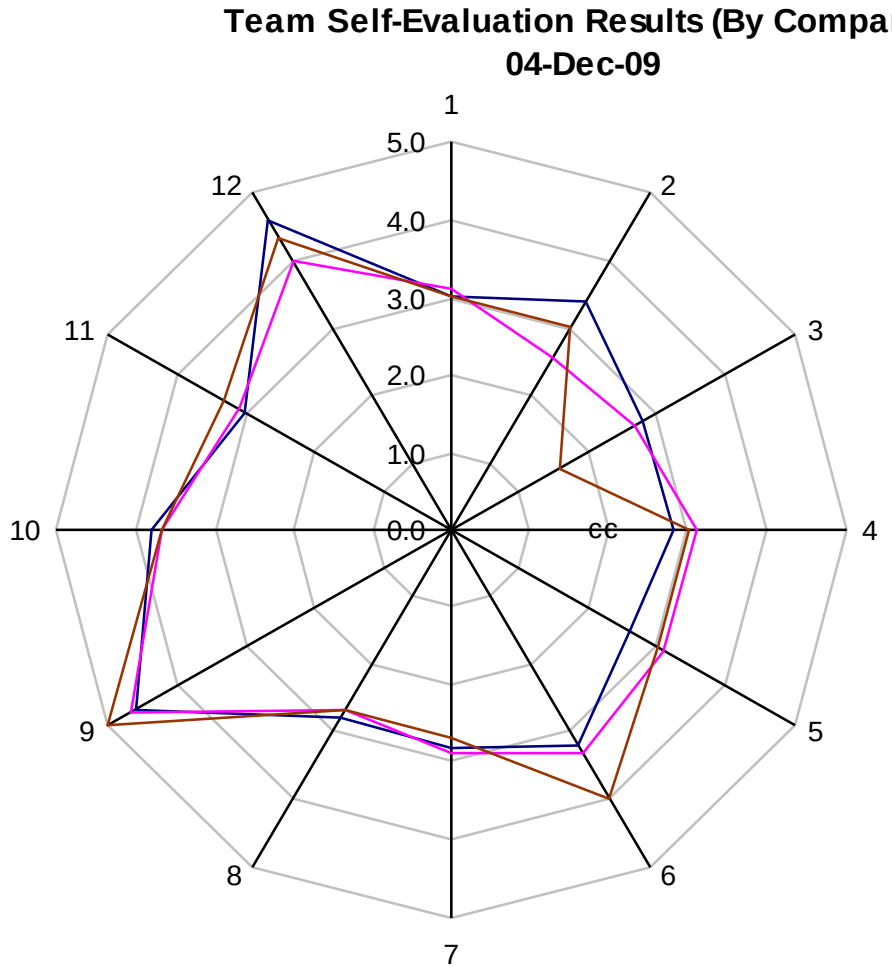
Team Self-Evaluation Results (Combined)
04-Dec-09



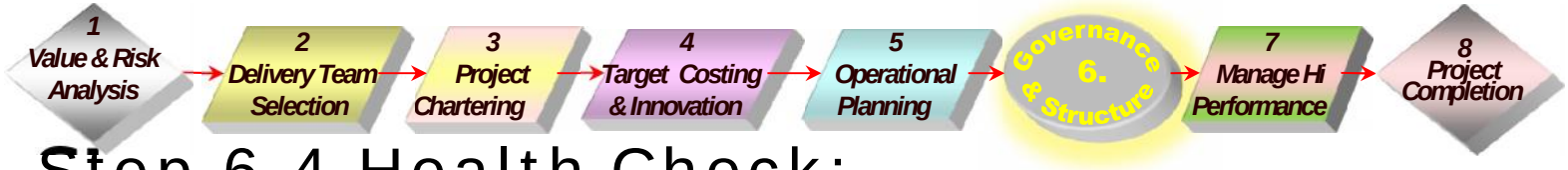
1. Communications
2. The flow of information
3. The timeliness of information
4. Cooperation
5. Problems, issues or concerns
6. Responses to problems
7. Disputes/problems
8. Problems are resolved
9. Construction safety performance
10. Design and construction quality
11. Value for money
12. Public Complaints



Step 6:4 Health Check: Team Alignment by Company



1. Communications
2. The flow of information
3. The timeliness of information
4. Cooperation
5. Problems, issues or concerns
6. Responses to problems
7. Disputes/problems
8. Problems are resolved
9. Construction safety performance
10. Design and construction quality
11. Value for money
12. Public Complaints



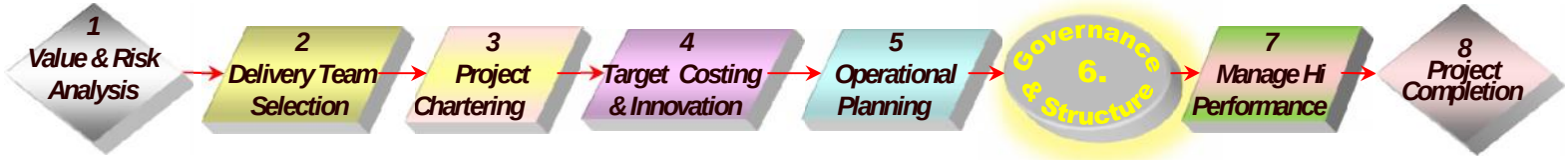
Step 6.4 Health Check:

Health Check Tool: Example

COMMUNICATION				
1.	Team Communications are...	difficult, guarded	1 2 3 4 N/A	open, up-front
2.	Information flow is...	restricted	1 2 3 4 N/A	free, open
3.	Timeliness of information is...	late	1 2 3 4 N/A	on-time
4.	Communications / Meetings are...	ineffective	1 2 3 4 N/A	effective
WORKING RELATIONSHIPS				
5.	Cooperation between Project Groups is...	Poor, Detached	1 2 3 4 N/A	good, unreserved
6.	Issues and concerns are...	ignored	1 2 3 4 N/A	dealt with quickly
7.	Responses to issues become...	personal, negative	1 2 3 4 N/A	project specific
8.	Disputes are addressed...	ineffectively	1 2 3 4 N/A	Efficiently
9.	Problems/issues are resolved by...	Senior Management	1 2 3 4 N/A	lowest level
10.	Level of Trust is...	Low	1 2 3 4 N/A	High
PROJECT REQUIREMENTS				
11.	Safety is being...	ignored	1 2 3 4 N/A	considered
12.	Quality of work is...	not acceptable	1 2 3 4 N/A	acceptable
13.	Environmental requirements are...	ignored	1 2 3 4 N/A	considered
14.	Is the Project receiving Value for money	low	1 2 3 4 N/A	high
15.	Schedule Management is...	poor	1 2 3 4 N/A	Effective
16.	Cost Management is...	not acceptable	1 2 3 4 N/A	acceptable
STAKEHOLDER & EXTERNAL ISSUES				
17.	Public Complaints are...	frequent	1 2 3 4 N/A	infrequent
18.	Client Involvement is...	late, unclear, vague	1 2 3 4 N/A	timely/relative
TEAM SATISFACTION				
19.	Completion of milestones are rewarded / recognized	ineffective	1 2 3 4 N/A	effective
20.	Overall Satisfaction is...	dissatisfied	1 2 3 4 N/A	satisfied

Please list examples for the points above that you rated 1 or 2

_____



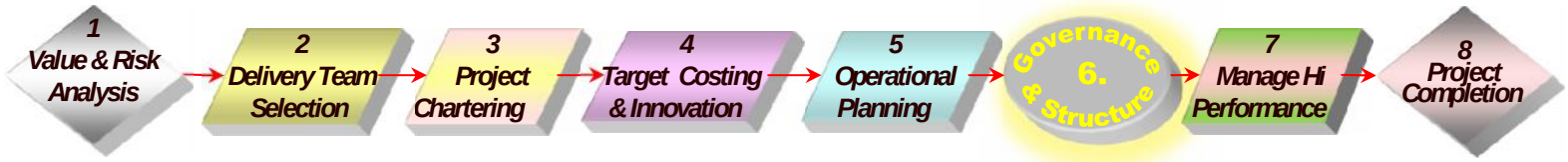
Step 6.5 Communications Plan

-- Getting get information out in the most rapid and accurate manner --

-- Dealing with the Public (internal & external) --

- **Overview**
  - **Who**
  - **What**
  - **When**
  - **Where**
  - **Why**
  - **How**
- **What to Avoid**
  - **Rumors**
  - **Poor Coordination with Press**
  - **Key Failure Factors**
- **Internal Communications Plan**
- **External Communications Plan**
- **Responsibilities (joint? Separate?)**
- **Spokesperson Coordination**
- **Press Release**
- **Timetable**

- **Frequently Asked Questions**
  - **Who is the alliance between?**
  - **Why are you joining forces?**
  - **What is the purpose of the alliance?**
  - **What will be the impact on me?**
  - **Who else is involved?**
  - **What will you be doing?**
  - **Is this just temporary?**
  - **What does the agreement say?**
  - **When do we see results?**
  - **What are your key priorities?**
  - **What's my role?**
- **Hardest Answered Questions**
  - **Are you eventually buying the other company?**
  - **Will you be firing people?**
  - **Will you be changing my job?**
  - **Can we see the Operating Principles?**
  - **Other:**
- **Top Myths that will Erode the Alliance**

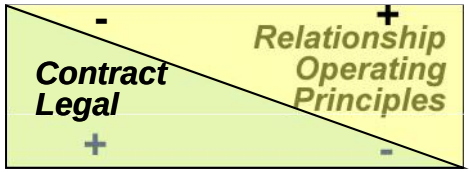


Step 6.6 Commercial & Legal Terms

Contract Management Options

Transactional ⟷ **Relational**

- Driven by Strict Financial Costing
- Very Legalistic
- Rigid Interpretation
- Clearly Defined Contract
- Managed at Junior Levels
- Penalties for Non-Performance



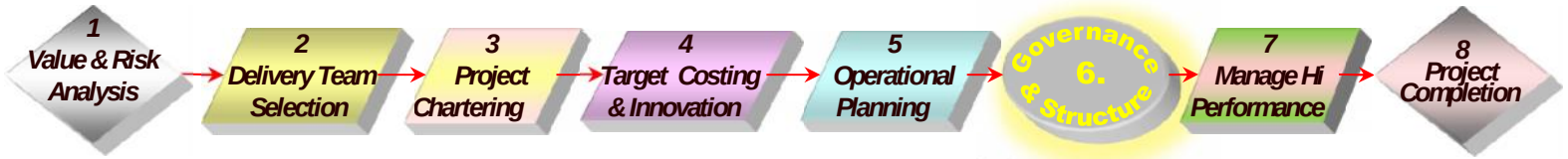
- Dynamic Strategic Conditions
- Win-Win Based
- Shared Objectives & Values
- Driven by Innovation, Operating Principles, & TCO
- Committed in Absence of Well Defined Contract
- Managed at Senior Levels

Works best with:

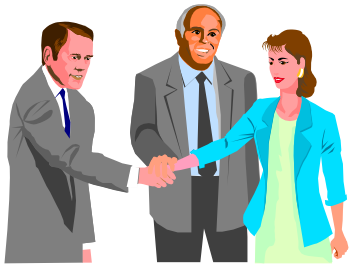
- ✓ Vendors
- ✓ Short Term Contracts
- ✓ Commodities & Procurement Situations
- ✓ Stable Conditions
- ✓ Low Levels of Integration
- ✓ Power Lies Primarily with the Contractor
- ✓ Multiple Options for Shifting Suppliers (Win-Lose results will not jeopardize the Contractor's Future)

Works best with:

- ✓ Strategic Suppliers & Mission Critical Providers
- ✓ Long Term Arrangements
- ✓ Conditions of Uncertainty
- ✓ High Levels of Integration & Collaboration
- ✓ Power is Balanced or on the Side of the Supplier
- ✓ Limited Options for Shifting Suppliers



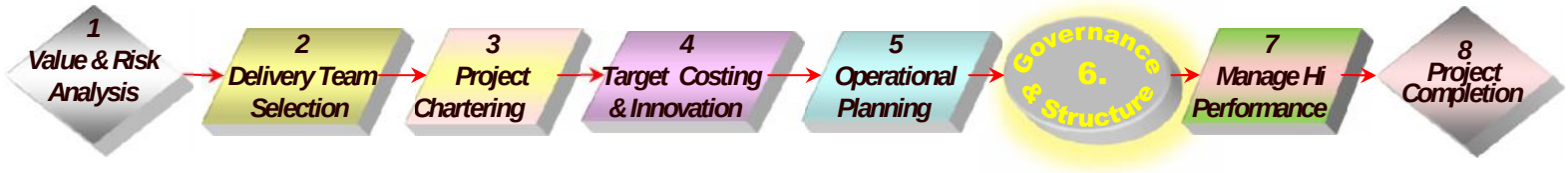
Step 6.6 Commercial & Legal Terms: Beware of Contract Illusions



Beware the Contract that becomes the dumping ground for everything: legal, risk shedding, exculpation, management, strategic, operational, etc.
It's dead, a garbage pit can of undifferentiated junk that no one wants to read or be held responsible for it.

- **Contracts are not a complete picture of the Alliance, The Alliance is not Contained inside the Contract**
- **Contracts are created at a point in time; When conditions change, the contract is often obsolete**
- **Too often, those who are operating the alliance**
  - **Did not participate in the contract discussions**
  - **Have never read the contract**
  - **Have a very different understanding of the alliance than that which is embodied in the contract**
- **Contracts are usually designed to protect the lawyer's clients against risks and especially in the event of failure.**
- **The Best Protection is not a good contract, but disciplined use of Best Practices**
- **If you have to read the contract on a regular basis to make the alliance work, the alliance is probably dead.**
- **If the alliance becomes obsolete or no longer has value to one of the partners, be sure the treats Exit Issues in a fair & equitable way**

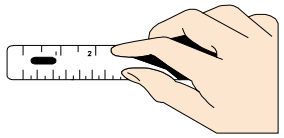
No alliance ever succeeded or failed because of the quality of the legal agreements.



Step 6.7 Realignment of Metrics & Rewards

Don't forget: Managers must not be torn between to worlds – Base Camp and Field Work – Measure and Reward what happens in the field of action.

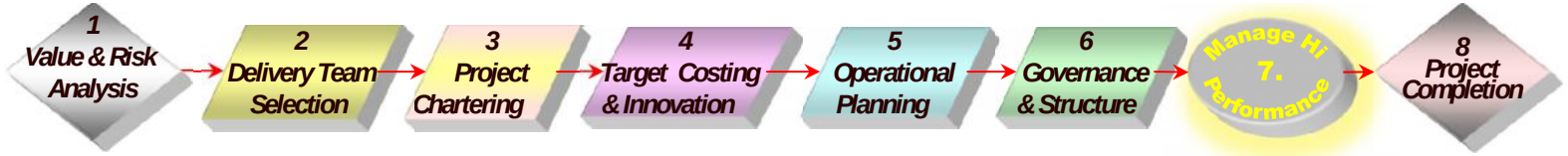
- Metrics
  - ✓ Measures of "Winning"
  - ✓ Value Proposition
  - ✓ Performance Measures
  - ✓ Leading Indicators
  - ✓ Diagnostic Indices



- **Rewards**
  - ✓ **Compensation**
  - ✓ **Recognition**
  - ✓ **Career Paths**
  - ✓ **Promotion**
  - ✓ **Punishments**
  - ✓ **Culture**

Must ~~Tie All Three~~ Together to Sustain Change Or Suffer Dysfunctional Behavior

CREATING CULTURE



Manage High Performance

- **Key Steps**
  - 7.1 Project Alliance Launch
  - 7.2 Standards of Excellence
  - 7.3 High Performance Coaching
  - 7.5 Monthly Health Diagnostics
  - 7.6 Risk Monitoring
  - 7.6 Mediation as Needed

Creating Value & Getting Results

Predictability +

Performance +

Productivity → Profit

COMPETING THE SESSION

- Last Check: Is this a Win-Win Arrangement?
- Next Steps
- Appreciations
- Accomplishments:
  What I got out of this.
- Actions:
  What I will do Differently
- Wrap-up

Use for Communications to others

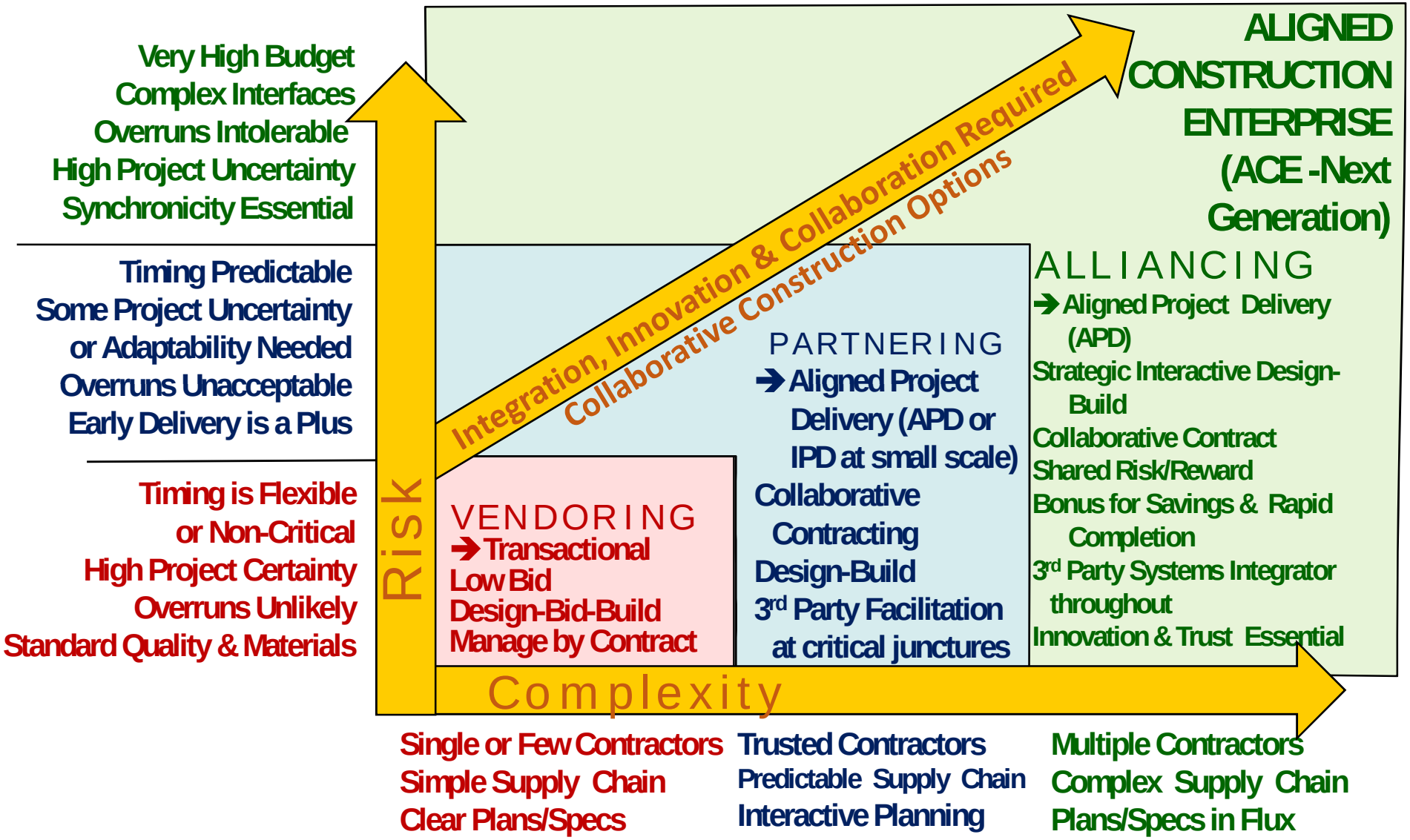
Managers make things work EFFICIENTLY inside the Current Game

Leaders CHANGE the RULES of the GAME to create COMPETITIVE ADVANTAGE

Appendix

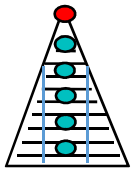
Risk& Complexity – Construction Relationship Options

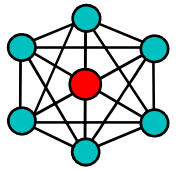
the Greater the Risk & Complexity,
the Greater the Need for Collaboration



Law of Ambiplexity & Complexiguity

The Higher the Levels of Ambiguity, Uncertainty, and Complexity
The Greater the Trust /Teamwork/Collaborative Innovation Needed





Best Practice

Build Collaborative Culture

Managing Ambiguity and Certainty

Certainty ⟵ ⟶ **Ambiguity**

Situation is Repetitive Covered by Rules	Situation has Multiple Factors, Clear Priorities	Situation is Complex, Interconnected	Situation is Chaotic, Paradoxical,
Issues Known and Stable Future is Relatively Predictable	Issues Can be Known Future is Probable	Multiple Unknowns Future is Vague or Complex	Multiple Unknowns & Changing, Future Fast Moving & Unknown
Impose Laws, Rules & SOPs	Impose Guidelines/Forecasts	Impose Best Process/Practice	Impose Principles
Proven Operating Procedures Stability is Desired/Possible	Use Judgment & Experience Decision Making Criteria	Use Intuitive Thinking Trust is Essential	Use Creativity & Intuitive Thinking, Prolific Innovation
Decide by Reason/Rationality	Analysis of Components	Examine Scenario Options	Create/Influence Scenarios
Everyone Follow the Book/Contract	Use Intelligence & Knowledge	Rely on Wisdom & Principles	Wisdom & Creativity
Focus on the Right Answer, Optimize Efficiency	Focus on Key Priorities Gain Proficiency	Focus on Systems Interaction Manage Interfaces	Focus on Opportunities & Questions, Aim for Zone
Reward Right Behavior, Functional Specialization	Use Clear Roles/Responsibilities, Tested Process, Communication	Flexibility & Team Coordination Cross Functional Integration	Rapid Response Teams & Multiple Rapid Experiments
No Tolerance of Differences	Tolerance of Differences	Support & Value Differences	Nurture Differences to Innovate
Position in Existing Markets	Multiple Market Forces	Changing Market Conditions	Incubate Emerging Markets

If it Ain't Broke, Don't Fix It!

Hierarchical & Transactional Leadership is Effective

If it Ain't Broke, Break It!

Collaborative Operating System is Essential

G. Jergeas & R.P. Lynch

Portions Adapted from David Snowden
IBM Centre for Organizational Complexity

Concern over Loss of Control

Which one gives you more control?

Which one scales up to achieve even higher performance?

Vendoring

- **Use the Vendoring Model when:**
  - **Risk of Overrun is Low**
  - **Little Chance of Litigation**
  - **Plans , Specs & Contract are Clear**
  - **Contractor will not need to interact with A&E**
  - **Complexity of Rollout is Low**
  - **Schedule has room to flex**
  - **Little Chance for Design Spec Changes**
  - **Component Cost is the best measure**
  - **Trust among Buyer & Seller is not a key issue**
  - **Few Contractors need coordination at job site**
  - **High Levels of Certainty, Clarity, Conformity**

When to Use Each Model

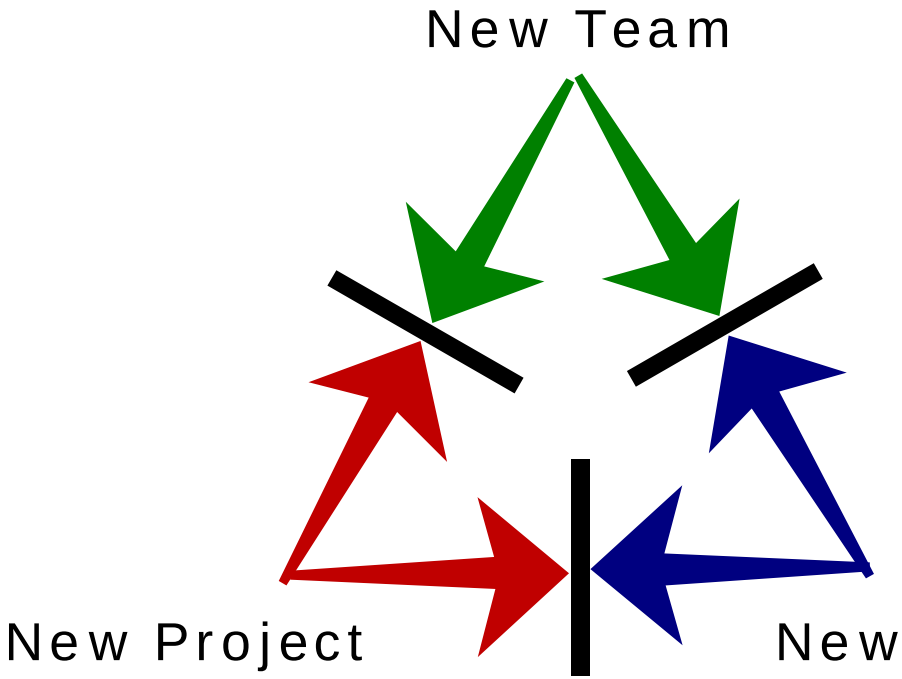
	Vendoring	Partnering	Alliancing
Size of Project	Small	Medium	Large
Risk of Overrun	Low	Moderate	High
Relationship Required to Produce Quality Result	Transactional	Cooperative	Interactive or Synergistic
Frequency of Purchase	One time or Long Hiatus between Buys	Often	Regular
Chance of Litigation for mistakes	Low	Moderate	High
Clarity/Stability of Specs	High	Moderate	Changeable
Chance of Significant Change Order	Low	Moderate	High
Interaction Needed with A&E/EPC/SCM	Very Low	Moderate	High
Complexity of Rollout	Low	Moderate	High
Room for Flexibility in Schedule	High	Moderate	Low
Chance for Design or Spec Changes	Low	Moderate	High
Optimum Measure of Cost	Component Cost	Life Cycle Cost	Total Cost of Ownership
Trust based on	Brand or Reputation	Core Values	Values & Shared Vision
Optimum Timing of Supplier Involvement	After Bidding	Somewhat Prior to Bidding	Early Engagement with Owner, A&E, & other suppliers
Number of Contractors Needing Job Site Coordination	Very Few	Moderate	Very Many

Core Principle in the Presence of Ambiguity & Uncertainty

- **The Greater the Uncertainty or Ambiguity at the Interface, the Greater the Need for Innovation, Reliability, Integration & Speed (IRIS).**
  - **Only Collaborative Systems have the highest chance of Innovative, Reliable, Integrative, & Speedy (IRIS) interaction across the interface.**
  - **Transactional Systems rely on complex terms and conditions for interaction, increasing the complexity, without simplifying or speeding the interface.**
  - **Adversarial Systems introduce fragmentation, conflict, and confusion at the interface**

Law of Compounding Risks

The Greater the Number of Uncertainties, and
The Greater the Multitude of Complex Interfaces,
Then …..
The Greater the Chances of Failure (on-time/budget)
The Greater the Need for Collaboration



3 New Elements
= 3 Interfaces
= 6 Interface Points

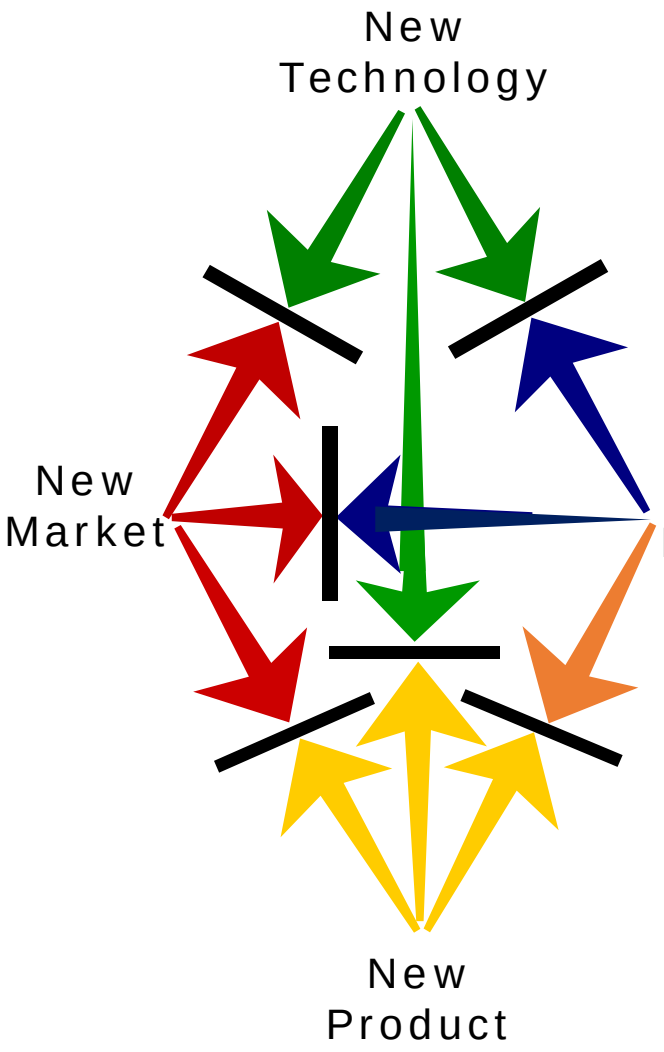
Where will Breakdowns will most Likely Occur??

Complexity Increases by Double the number of New Interfaces*

*Formula :(N)(N-1)=Number of Interface Points to Manag

Corollary: In a dynamic, moving environment, you are solving multiple simultaneous equations with multiple unknowns. It is essential to have one ":known" factor to solve the equation. The most important "known" to have is "trust" in facts, figures, and people.

Law of Compounding Risks



4 New Elements
= 4 Interfaces
= 12 Interface Points

Let's now introduce a NEW Location.

With Four NEW ELEMENTS there are now 12 different Interface Points to integrate, manage, and synchronize.

Each one presents a point of a potential Breakdown, which can trigger more breakdowns.

Using "Big Bang" Rollouts increases the chance of a total systems collapse.

The Condition of the Interface is critical to it's performance.

- **Adversarial interfaces are dysfunctional and destroy value.**
- **Transactional interfaces are serial and require quid-pro-quo**
- **Collaborative interfaces are fast, neural, and foster innovation.**

Options for addressing Complexity & Compounding Risks are:

- **<u>Simplify</u>: Reduce the number /levels of interfaces & NVA**
- **Cluster: bring sub-systems into alignment**
- **<u>Clarify</u>: Make the interfaces more clear/transparent**
- **<u>Predict</u> : the Breakdown Points in advance and resolve**
- **<u>Tested Methods</u>: Use standardized, tried & true processes, technologies, and people who are experienced at handling these breakdowns with tested Processes and Protocols**
- **<u>Early Warning Systems</u>: Establish leading indicators**
- **<u>ReSequence</u> the Rollout to enable corrections to occur before the next phase**
- **<u>Use Pilot Projects</u> at a small scale to test the system.**
- **<u>Governance</u>: People & methods to control spinout**
- **<u>Teamwork</u>: Ensure Trust and Collaborative Operating Systems exist at every complex interface. Commit to turning Breakdowns into Learning to trigger Breakthroughs**
- **<u>Best Practices/Processes</u> to increase chances of success**
- **<u>Dynamic Innovation & Planning</u>: to address or resolve moving/emerging issues in real time.**

Laws of Compounding Risks & Interfaces

The Greater the Compounding Risks, the Greater the Need for either Simplicity or Synergy

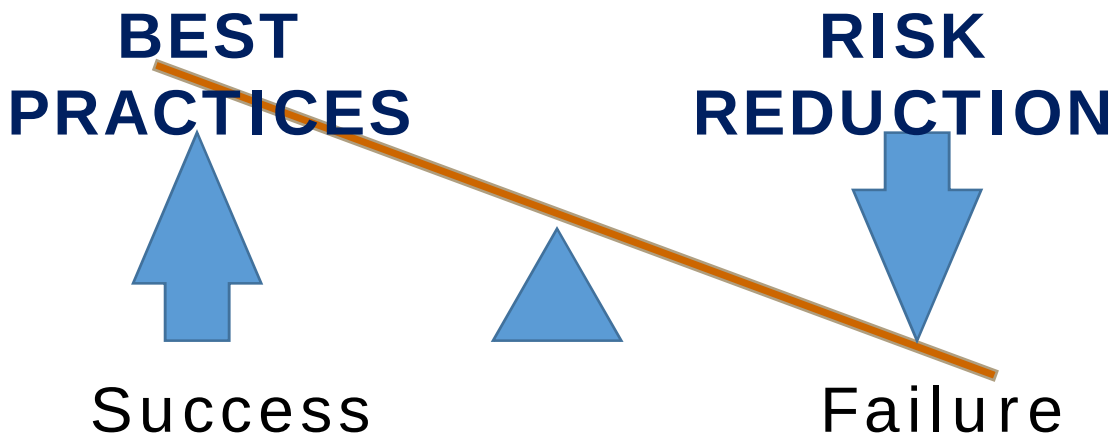
- Simplicity Removes Complexity
- Synergy Integrates Complexity

The Greater the Compounding Interfaces, the Greater the Need for Collaboration at the Interface

- Interfaces are where most breakdowns will occur
- Breakdowns can be anticipated, diagnosed, averted, and most quickly resolved *only* when there is trust at the interface.

Best Practices versus Risk Reduction

- Best Practices are designed to work in conjunction with Risk Reduction to accomplish two things:
  - Best Practices INCREASE the Chances of Success
  - Risk Reduction is intended to ELIMINATE the Adverse Effects from Risks
- Both must be used TOGETHER



Differential Interface Risk

- **Risk is Maximized where different interfaces meet**
  - **Risk is accentuated where distrust prevents fluid interchange at the interface (Silo Effect)**
- **The Larger the Difference or Faster the Change, the Greater the Trust Requirement**
- **Trust Impacts Risk Analysis**
  - **Cooperation/Coordination of Stakeholders**
    - **Labour, Management, Customers, Suppliers, etc.**
  - **Speed & Quality of Decisions**
  - **Collaborative Innovation**

Definition:
Risk Management

The culture, processes and structures that are directed towards realising the

- potential opportunities,
- while managing adverse effects.

Risk Management

Often overlooked in the metrics/rewards scenario are the measures of Risk Management, which can often interfere with innovation. Risk Management traditionally prevents people from experimenting and exploring. Great companies that promote innovation actually reward people for experiments, even if the experiment 'fails,' (in which event it's called 'learning).

Some of the risks to examine:

- *Risk of Creation – Chances of Failure as a business if we don't create?*
- *Risk of Protection – IP and Knockoff if someone else gets our idea?*
- *Risk of Proliferation – Distribution of our methods is critical*
- *Risk of Acceptance – Consumer, Retailer, Corporate Buyer must want what we have*
- *Risk of Timing – Too Late, Too Early—are we entering the market at the right time?*
- *Risk of Production – Have we designed our new product or system for ease of Production, Service & Operations?*
- *Risk of Obsolescence – If we don't shift to the Next Generation, will we be considered obsolete?*
- *Risk of Myopia – are we trapped in believing the Future will be a Reflection of the Past?*
- *Risk of Diversion – does this innovation divert our of energy, resources, and time onto something that will not produce rewards?*
- *Risk of Distrust – are we engaged with people or organizations where the level of distrust will doom any meaningful Collaboration & add high levels of non-value added work or worse?*

Law of Ambiplexity & Complexiguity

The Higher the Levels of Ambiguity, Uncertainty, and Complexity
The Greater the Trust /Teamwork/Collaborative Innovation Needed

Best Practice

Build Collaborative Culture

Ambiguity-Certainty Continuum

Certainty ⟵ ⟶ **Ambiguity**

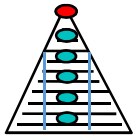
CONDITIONS

IF

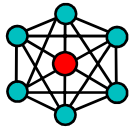
THEN

Stability and Predictability
Routines Required
Anticipated Problems
Developments Within Organiz. Control
Info Clear & Adequate

Dynamic change
Innovation Required
Unanticipated Problems
Developments Outside Organiz. Control
Info Unclear or Inadequate



MANAGEMENT FUNCTIONS



Hierarchical /Transactional Task Mgmt Style
Mature Decision Making @ Higher Levels
Tight Structures, Control, Contracts
Predominant Vertical Info Flow
Impose Laws, Rules, Clear Roles, & SOPs
Analytical Thinking inside Functional Silos
Rules-Based Predictability Essential
No/Little Tolerance for Deviance

If it isn't broken, don't fix it

Collaborative Mgmt Styles
Mature Decision Making @ All Levels
Looser Structures, Coordination, Vision Driven
Predominant Lateral/Network Info Flow
Operating Principles, Manage Interfaces
Creative & Integrative Thinking Across Boundaries
Trust , Teamwork & Speed Essential
Shared Risk, Reward, Decision-Making

Redesign it Before it's Obsolete