

INnovation vs. inNOvation

Moving new ideas to value adding activities

CESSE Mid-Winter

CEO Meeting

Feb. 11-14, 2007

Tucson, AZ

Innovation

Chemical Process vs. Management Process

Similarities and Differences



Superflexsm

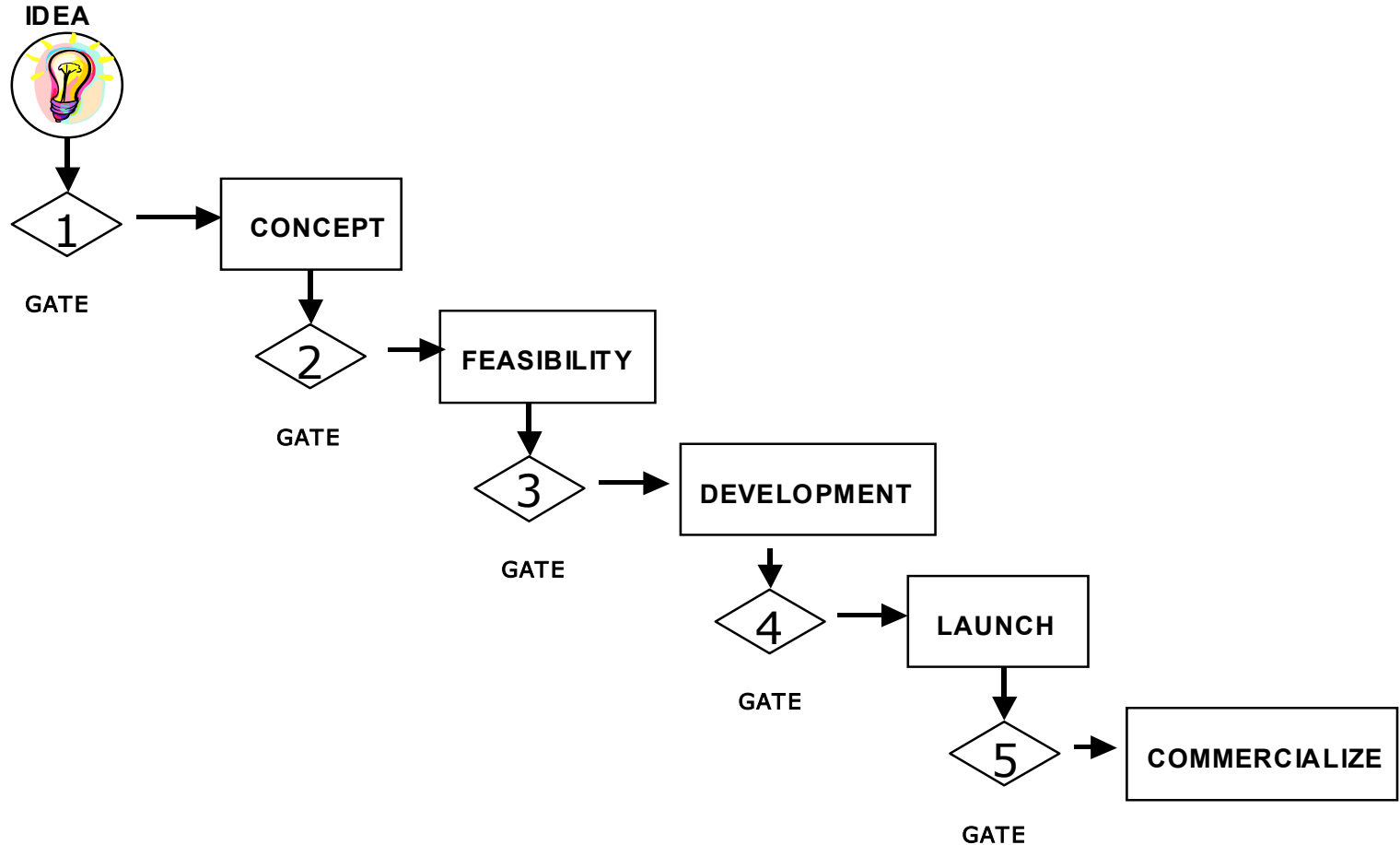


AIChE
(& a few others!)

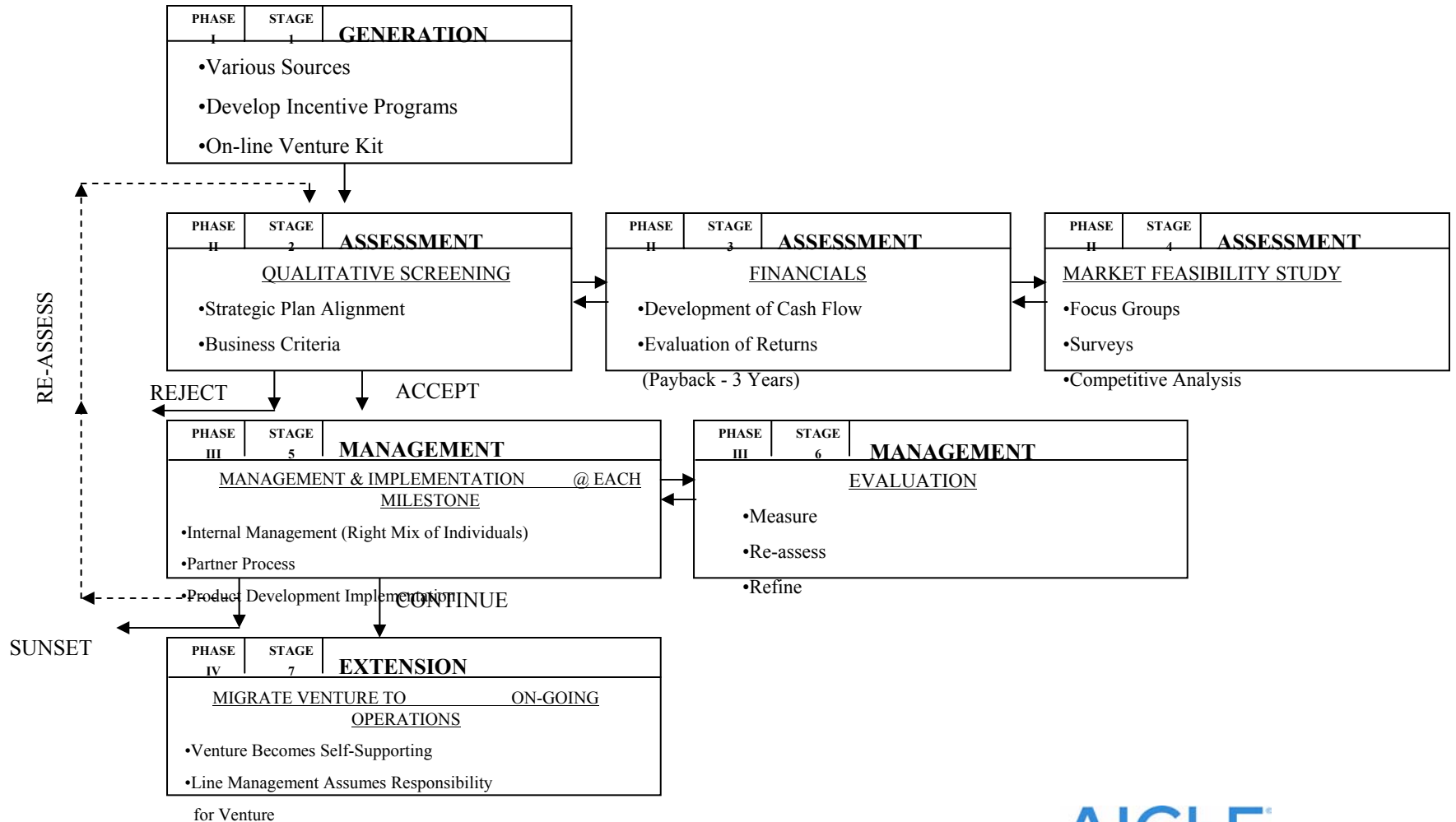
Innovation Requirements

- Processes
 - Brainstorming
 - Staged gate
 - Portfolio management
 - Skunk works
 - Cocoon strategy
 - Resource allocation
- People
 - Diversity of everything!
 - Management atmosphere
 - Risk taking
 - Encouragement
 - Incentives

A “Stage-Gate” Process

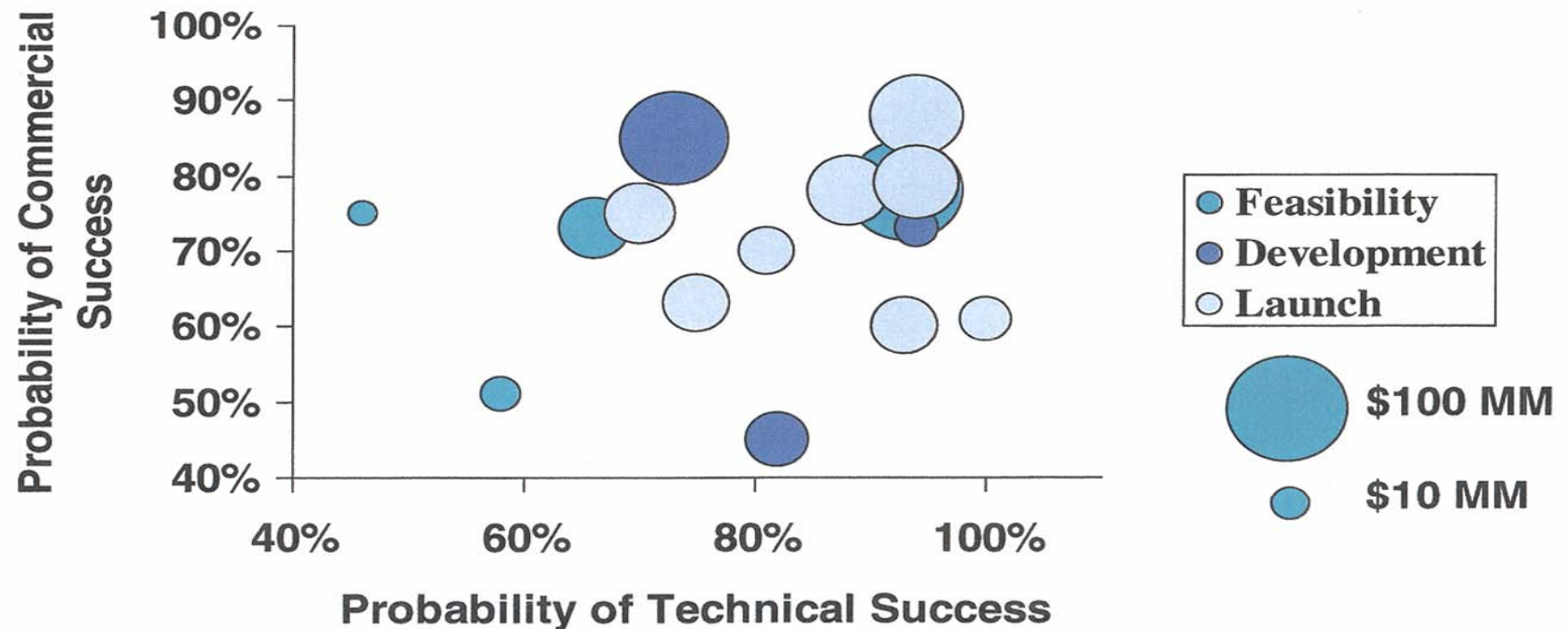


IV. Venture G.A.M.E.* Process From Concept to Delivery



**(Generation, Assessment, Management & Extension)*

Market & Technology Risk Value Diagram



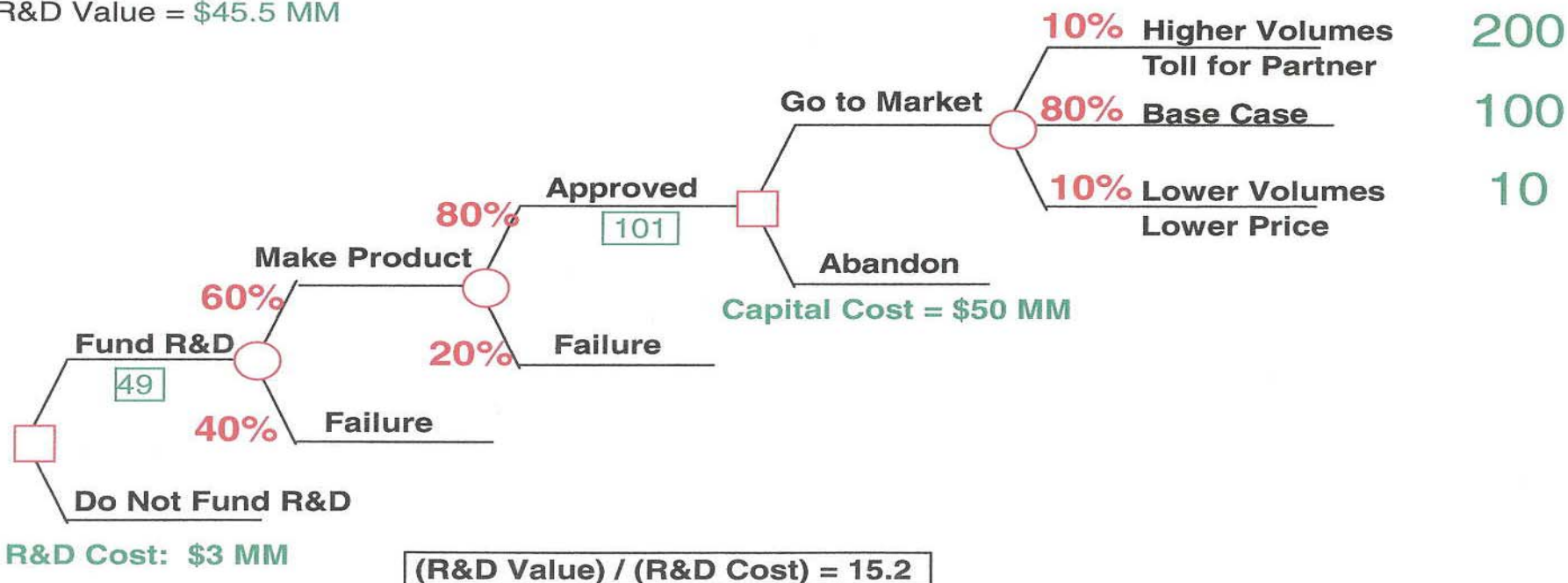
Decision Tree/D. & R.A. Example

Research Decision	Technical Outcome	Agency Approval Other Uncertainty	Commercialization Decision	Market Outcome	NPW12 (\$MM)
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Expected Market Value Given Technical Success & Approval = \$101 MM

Expected Market Value = \$48.5 MM

R&D Value = \$45.5 MM

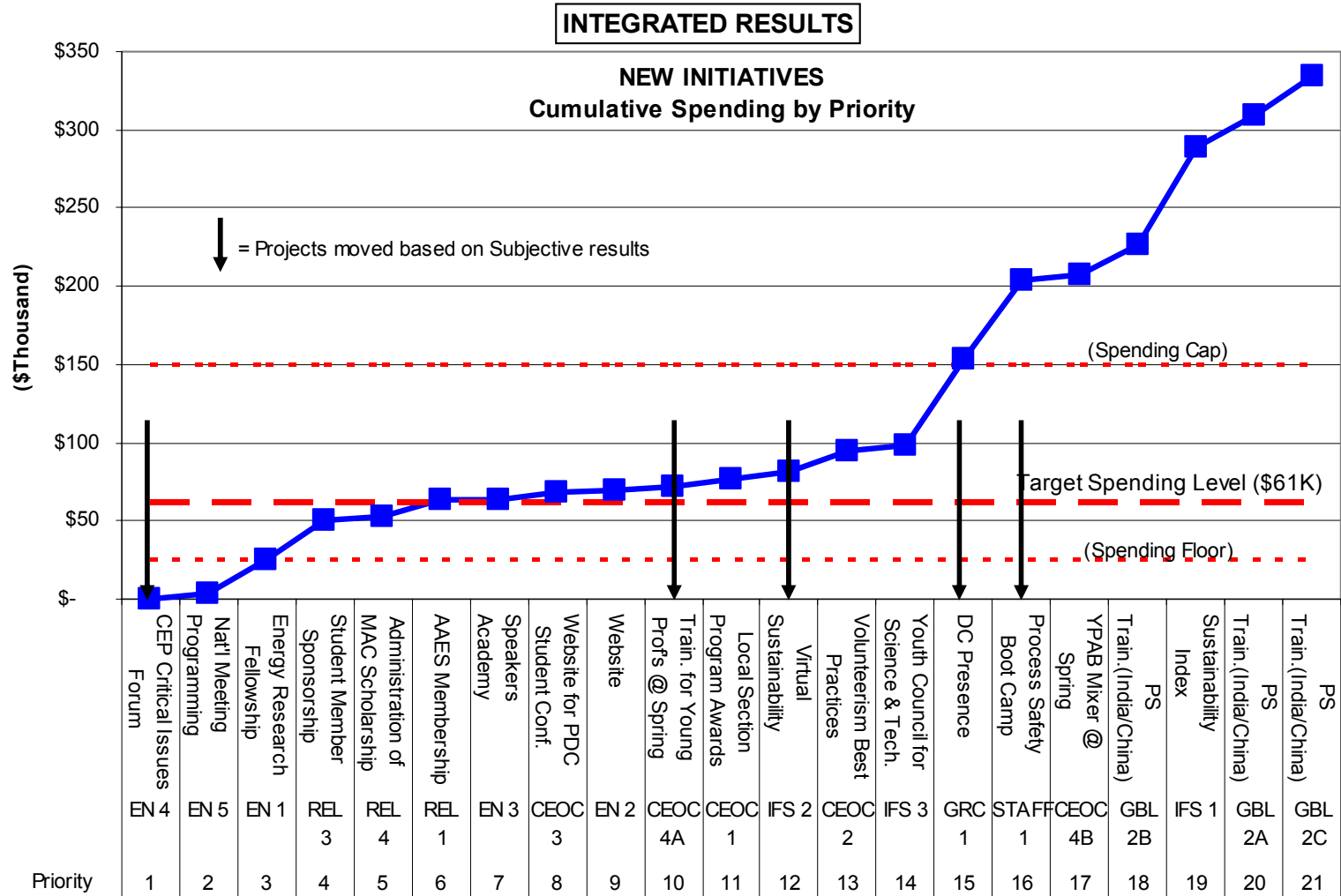


Priorities can be developed and weighted by leaders...

NFP Example

NEW INITIATIVES COMPARISON GRID - SCORING VERSUS CRITERIA												
PROJECT	Short-Term or Strategic (a)	2007 Funds (\$K)	Impact on Net Assets (3 yrs) (\$K)	Impact on Membership (3 yrs)	Raising Awareness	Likelihood of Project Success	Likelihood of Fundraising Success	Total Project Cost (\$K)	Seed Money Required (\$K)	Project Champion	PROJECT SCORE	
	Weightings		5.3	6.6	2.6	2.9	2.1	1.7	1.7	2.1		
CEOC-1	Local Section Program Awards	Strategic	\$ 5.0	1	2	2	6	6	2	1	3	42.0
CEOC-2	Volunteerism Best Practices	Strategic	\$ 12.5	1	2	2	6	6	3	1	3	40.3
CEOC-3	Website for PDC Student Conference Workshops	Strategic	\$ 4.0	1	2	2	6	6	2	1	1	46.2
CEOC-4	New Horizons Program (2 projects)											
	1. Training for Young Professionals before Spring Conference	Strategic	\$ 2.0	1	1	2	6	6	2	1	1	39.7
	2. YPAB Mixer before Spring	Strategic	\$ 3.5	1	1	1	6	6	2	1	1	37.0
CEOC-5	CareerTools Plus	-----Included in Base Budget-----										
GLOBAL-2	Process Safety Training in India/China											
	1. Public Course Option	Strategic	\$ 20.0	2	2	3	2	2	2	6	2	23.7
	2. Licensed Content Option	Strategic	\$ 20.0	2	2	3	5	5	2	6	2	38.6
	3. Certified Training Option	Strategic	\$ 25.0	2	2	3	2	6	2	6	6	23.4
STAFF-1	Process Safety Boot Camp	Short-Term	\$ 50.0	3	2	4	4	4	3	6	1	41.9

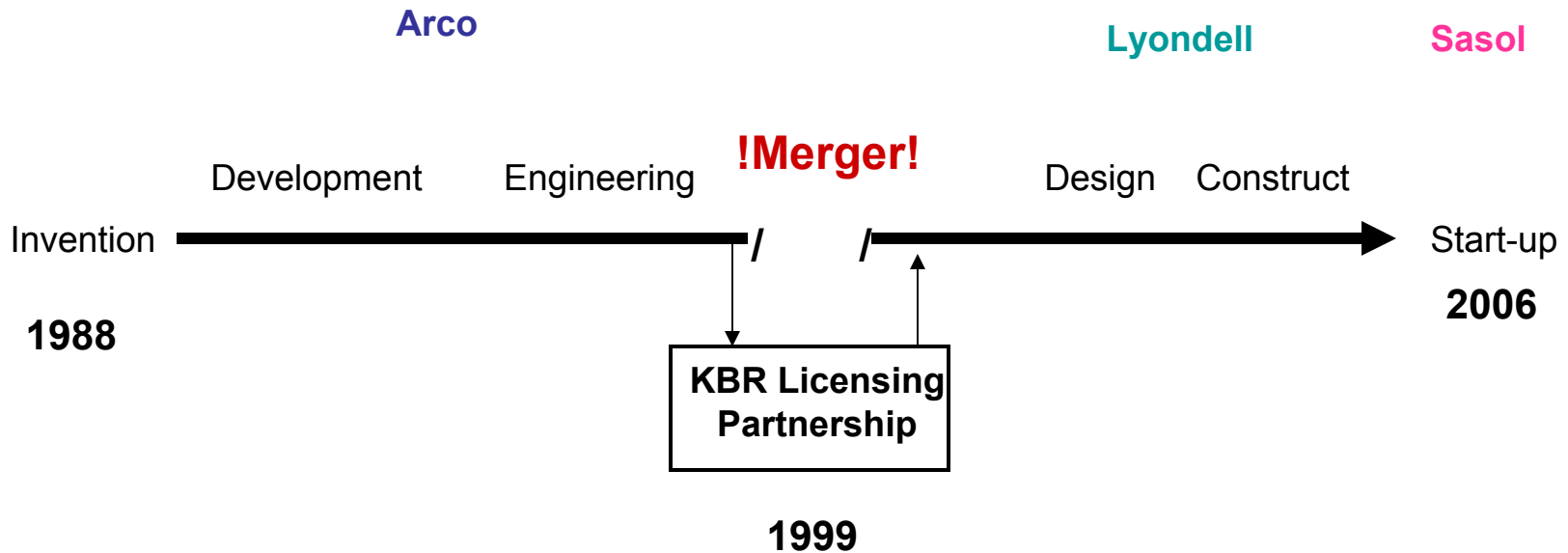
A “quantitative” methodology can help take the politics out of project ranking...



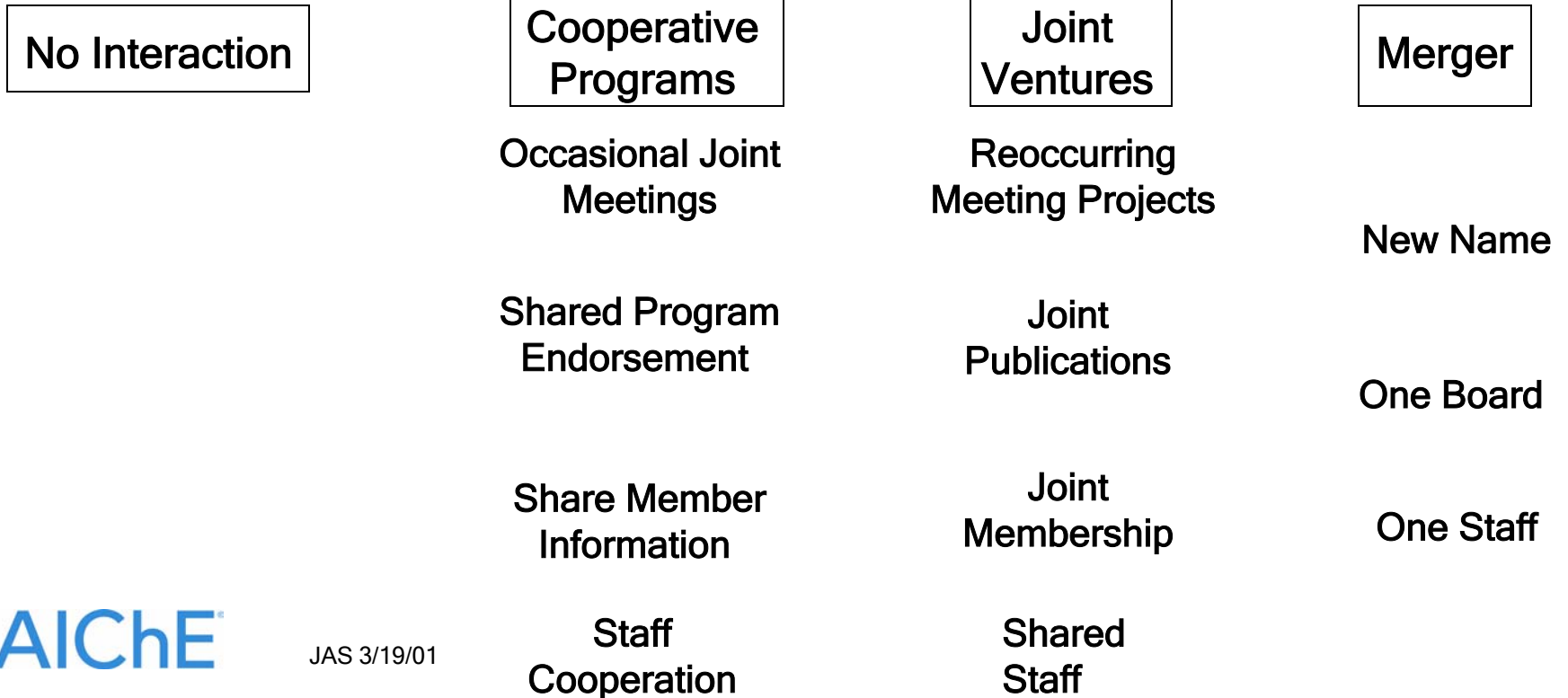
Cocoon Strategy for Innovation

Sometimes, a good idea needs to go hide for a while....

Superflex^{SR} Innovation Time Line



The Alliance Continuum



AIChE has moved along the Alliance Continuum

- A merger with ACS seriously considered, but not concluded
- AIChE developed a number of key partnerships
 - Technical publications via John Wiley
 - Technical training via ASME
 - JV publication with ACS in biotechnology
 - Shared editorial content with IChemE
 - Many joint meetings with other societies
 - Joint membership programs with ASME and others
 - Industry membership partnerships in China and India
 - Shared service membership call center with XXX
 - Shared service provider to other societies, YYY

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- Prioritization is more challenging in NFPs
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 - Benefiting society and fulfilling Missions/Visions are more important
- Resources and funding is not just about money
 - Motivating a volunteer “workforce” is critical
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Do you have
feelings of
inadequacy?