

# **Why Project Performance Must Be Improved**

***“Back To The Future”***

**Project Production Institute Inaugural Symposium  
San Francisco, CA  
December 3, 2014**

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**DuPont (Retired)**



# Discussion Flow

- **The Business/Capital Connection**
- **Today's Realities**
- **Industry Trends**
- **Tomorrow's Opportunities**
- **Reflections**

# The Business/Capital Connection

*It Isn't About **Projects**...*

*It Is About **Business**!*



# The Business/Capital Connection

$$\text{ROIC} = \frac{\text{Net Income} - \text{Dividends}}{\text{Total Capital}}$$



# The Business/Capital Connection

## ROIC and P/E Multiples

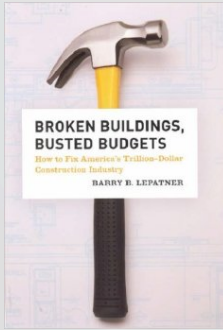
### Return on Invested Capital

		8%	10%	15%	20%
Earnings Growth	5%	8.5x	10.0x	12.0x	12.9x
	10%	5.7	10.0	15.8	18.6
	15%	0.1	10.0	23.4	29.9
	20%	NM	10.0	38.2	52.2

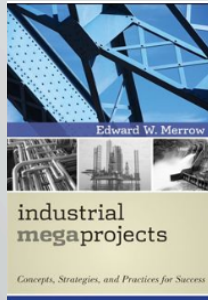
**Assume all equity financed; 10% WACC; 20-year forecast period.**



**Today's Realities...**



“Construction ranks the lowest among U.S. industries in the amount of money invested annually in technology, ..... Technology could create transparency between all the stakeholders in a project and improve efficiencies at all levels.”  
*Author Barry B. LePatner in his book, “Broken Buildings, Busted Budgets.”*



“...data from megaprojects shows that 65% ...failed to meet business objectives.” – *Author Ed Morrow, “Industrial Megaprojects”*

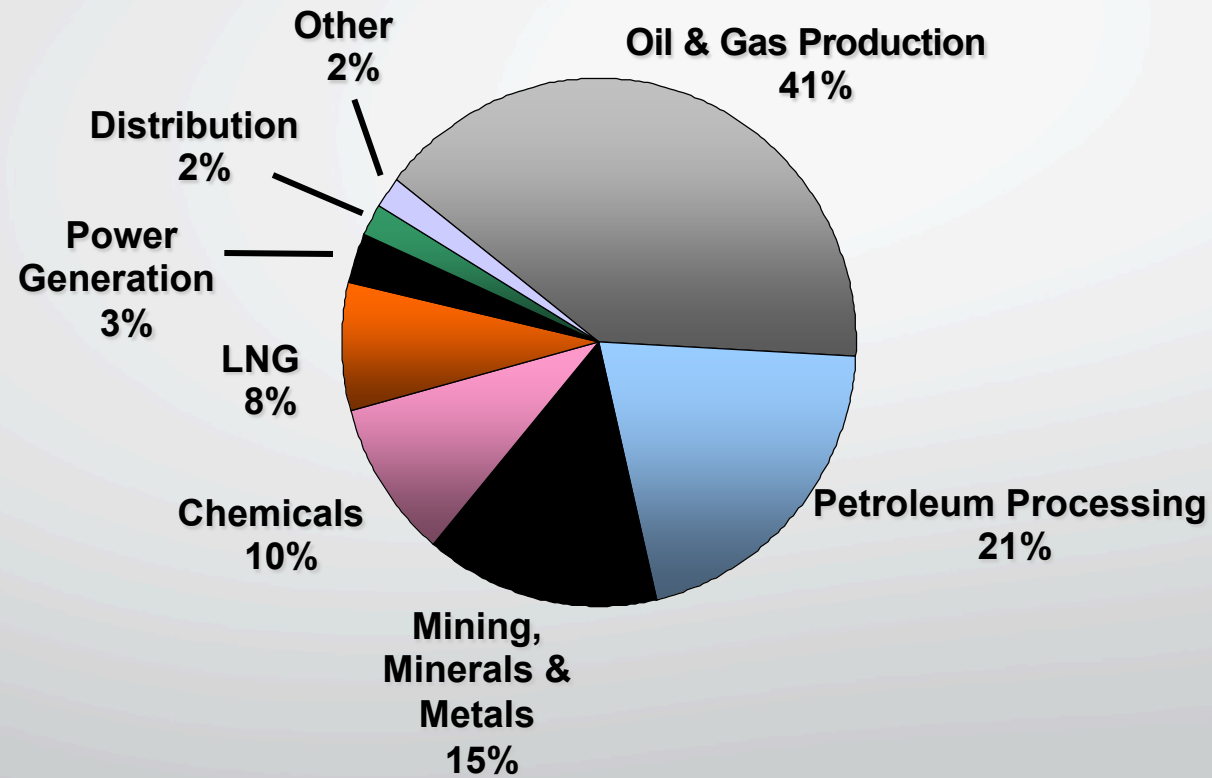


“..... construction productivity has decreased significantly over the last forty years. This is in large part because of a lack of communication and collaboration through information...” – *Author David Gerstel, “BIM and Construction Management”*

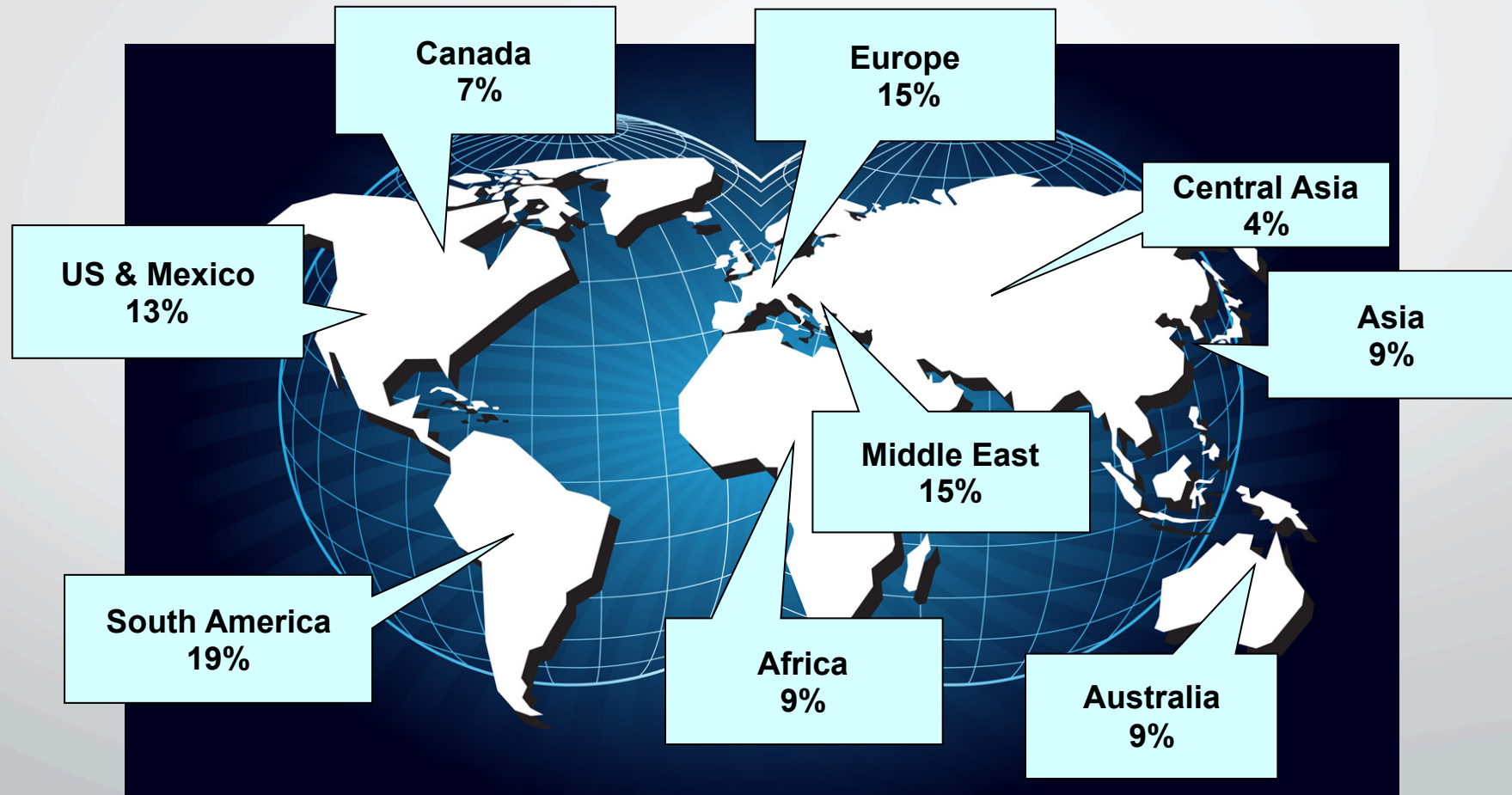
## Research Database

	Megaprojects Database
Number of Projects	318
Project Cost (in millions 2011 US\$)	\$3,250
Average Authorization Year	2005
Average Execution Duration (months)	43
Percent of Projects with Any New Technology	36%
Number of Owners Represented	77

# Industries Represented



# Geographical Distribution



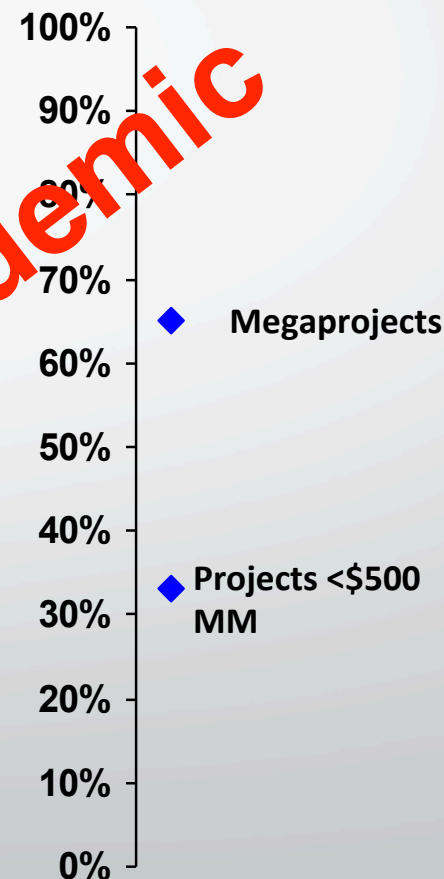
# Defining Success and Failure

- A project is deemed to be a failure if one or more of the following occurred:

Costs grew (real)	25% +
Schedule Slipped	25% +
Overspent ( <i>Absolute Measure</i> )	25% +
Severe and Continuing Operational Problems for 2 Years or more after startup	Yes

- About two-thirds of large projects failed by these criteria – twice the rate of smaller projects

Failure Rate





# **Core Question 1**

**Why are so many projects failing to meet business objectives when we know and, in most cases, apply current project management best practices and approaches?**

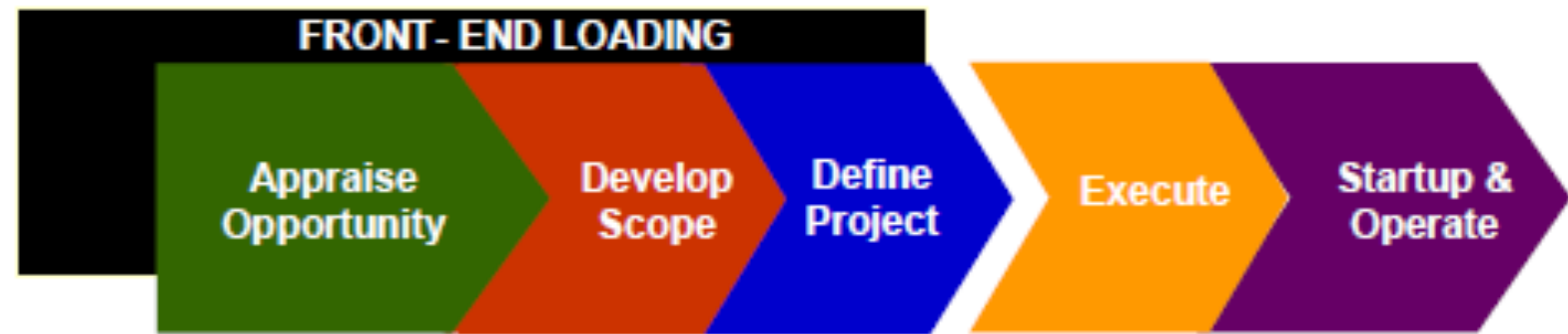


# Is it the Capital Effectiveness Principles?

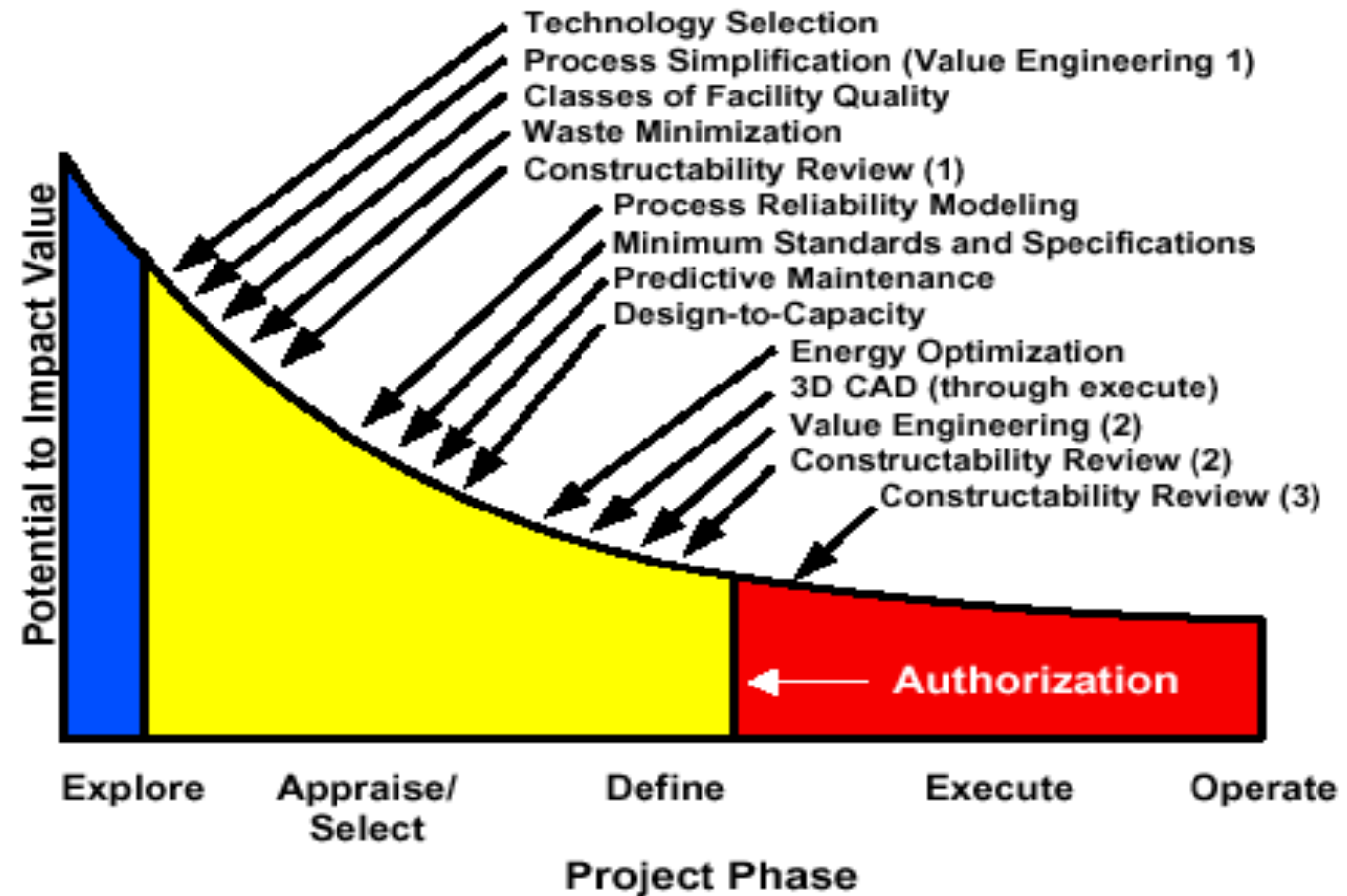
- Front-end load vs. business goals
- Install competitively superior technology
- Minimize non-value adding investment
- Ensure HSE excellence
- Execute projects with no changes

*The five CAPITAL EFFECTIVENESS PRINCIPLES provide a value-based approach to capital management . They align the day-to-day behavior and mindset of employees who plan and execute capital projects with the overall business objectives. They provide the foundation for making value-based decisions in alignment with the greater objectives of the business.*

# Is it the Project Management Work Process?



# Is it the Best Practices?





# Industry Trends...

# Businesses are Integrating Operations To Deliver Increased Value

## Business *Integration*

Strong supply chain  
integration within  
business teams and  
business strategies

## Execution

Drive effectiveness and  
efficiency in execution  
in plants and supply  
chains across  
businesses and regions

## Operations Center of Competency

Ensure organizational  
capability is in place  
  
Standardize and  
leverage

### *Deliverables*

Integrated strategies and  
operational plans

Productivity and asset  
effectiveness along supply chains

Technology ownership & integration  
along supply chains

Advancing Core Values

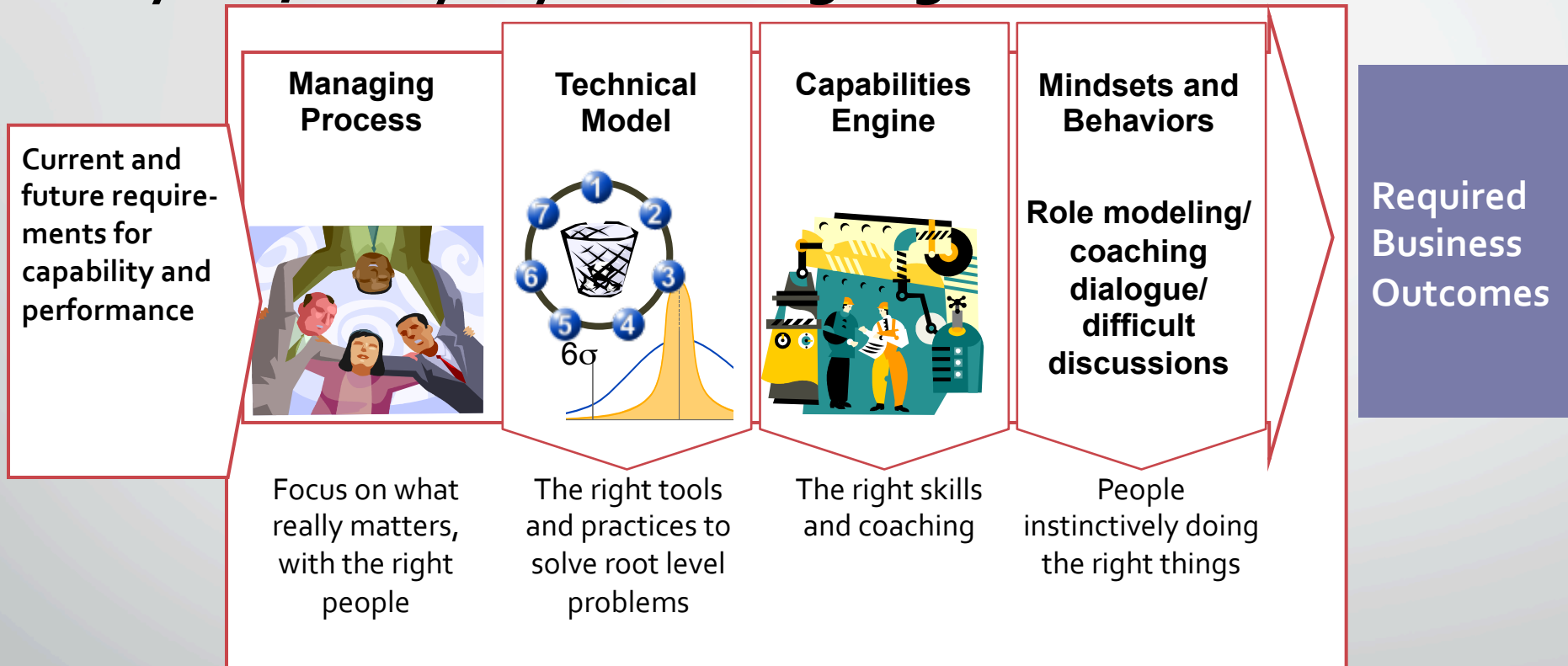
Capability building - People &  
organizational development

Mindsets and behaviors that foster  
engagement and superior execution

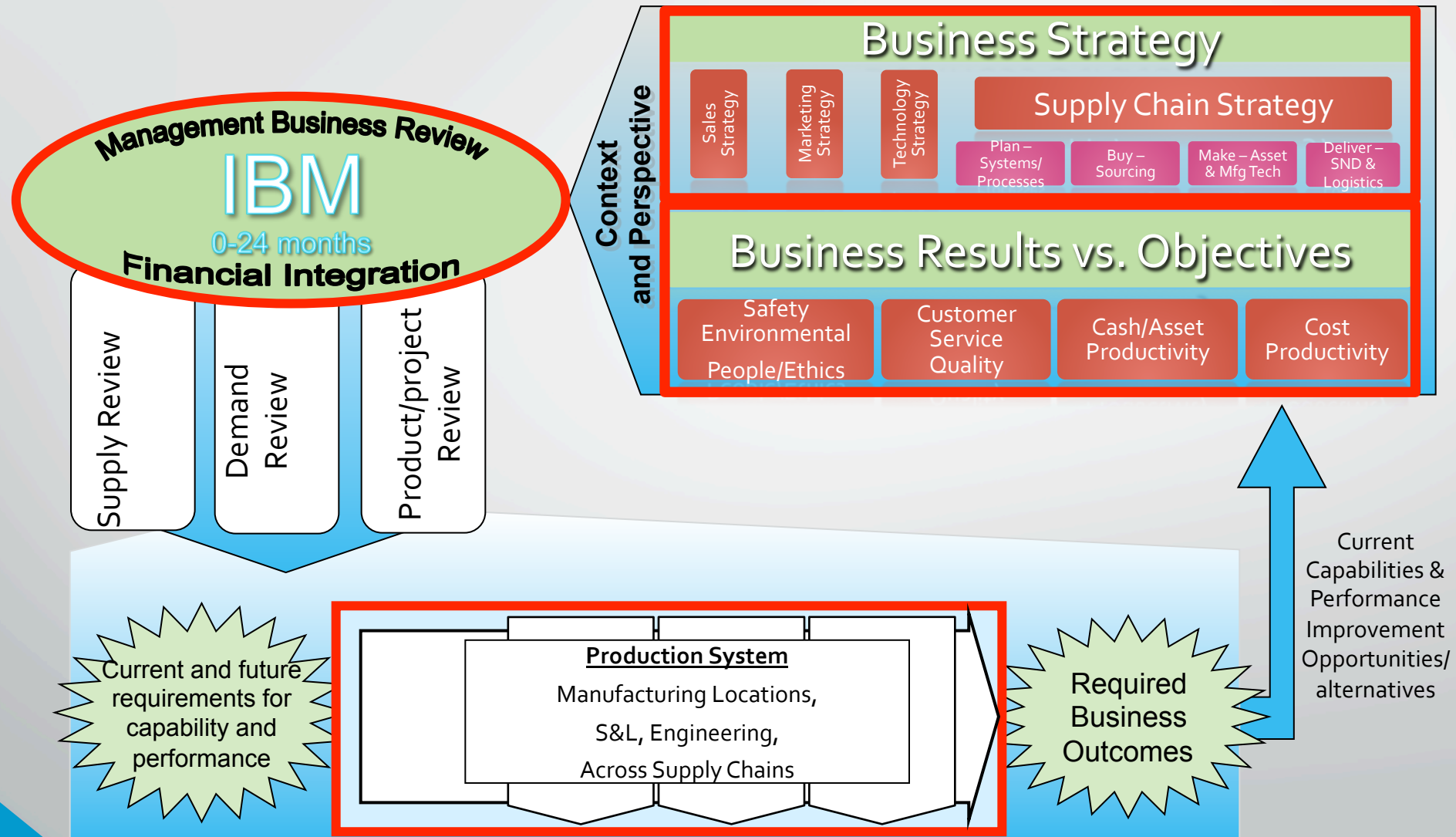
*Everyday, everyone together driving sustainable competitive advantage so our businesses win*

# They Are Installing Production Systems

Everyone, everyday – working together so businesses can win...



# They Are Tying It All Together





## **Core Question 2**

**Are these changes likely to make it easier or more difficult to reverse the current project performance trend?**



# So, what needs to change?

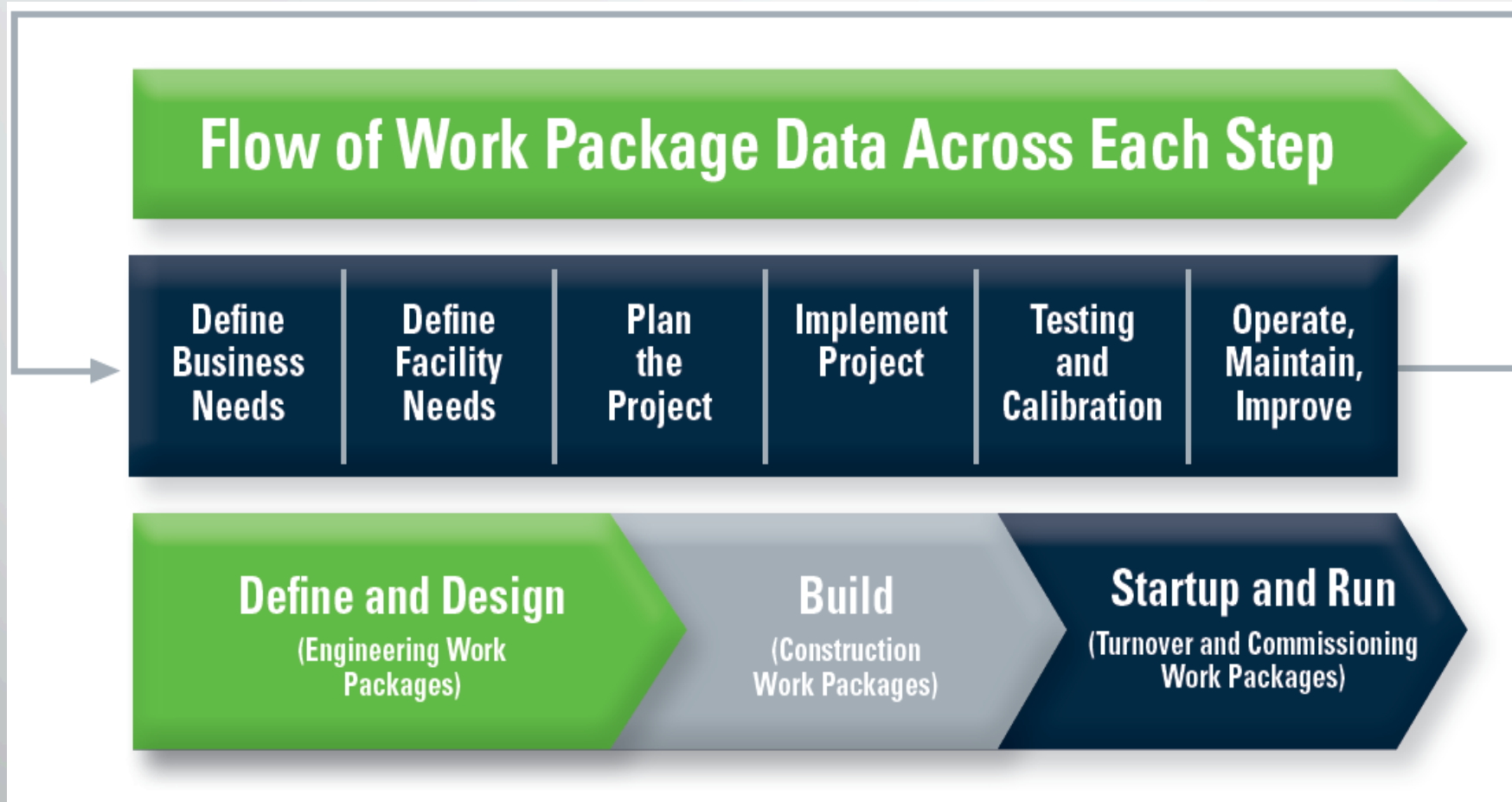


Bob Thaves, "Are We Creative Yet?" DuPont © 1990



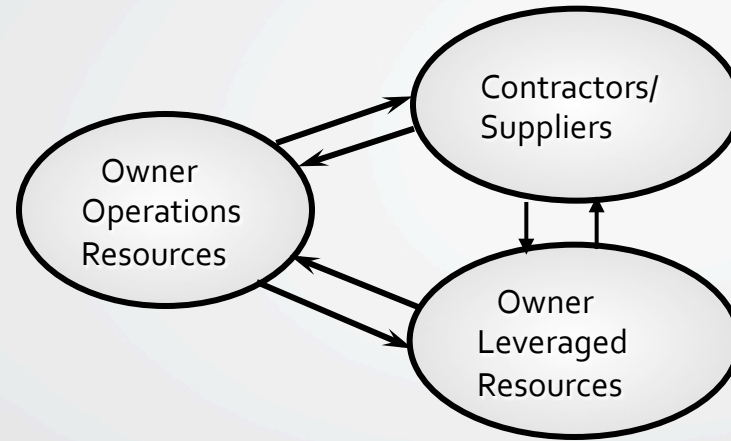
# **Tomorrow's Opportunities...**

# Work Packaging

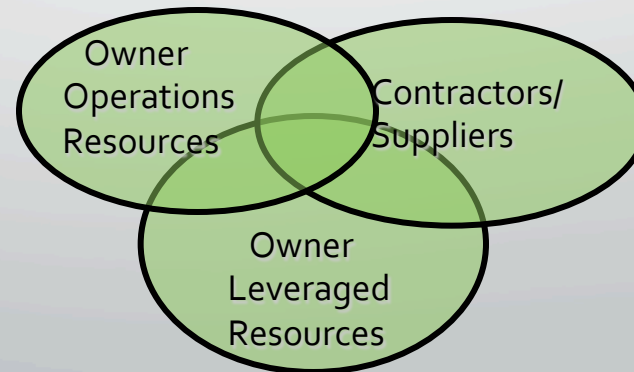


# Communication Strategy

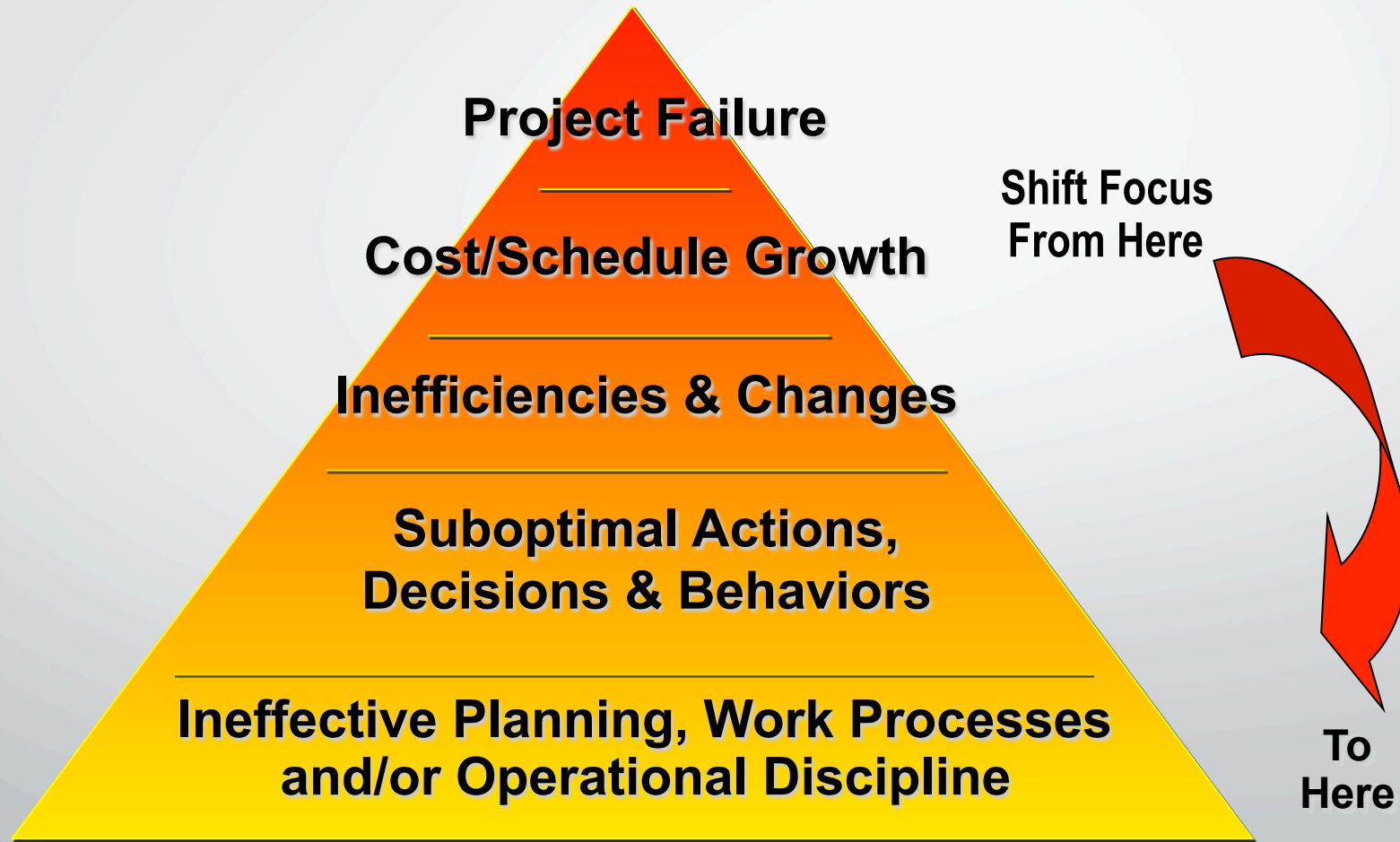
## From Coopetition



## To Collaboration



# Output Focus



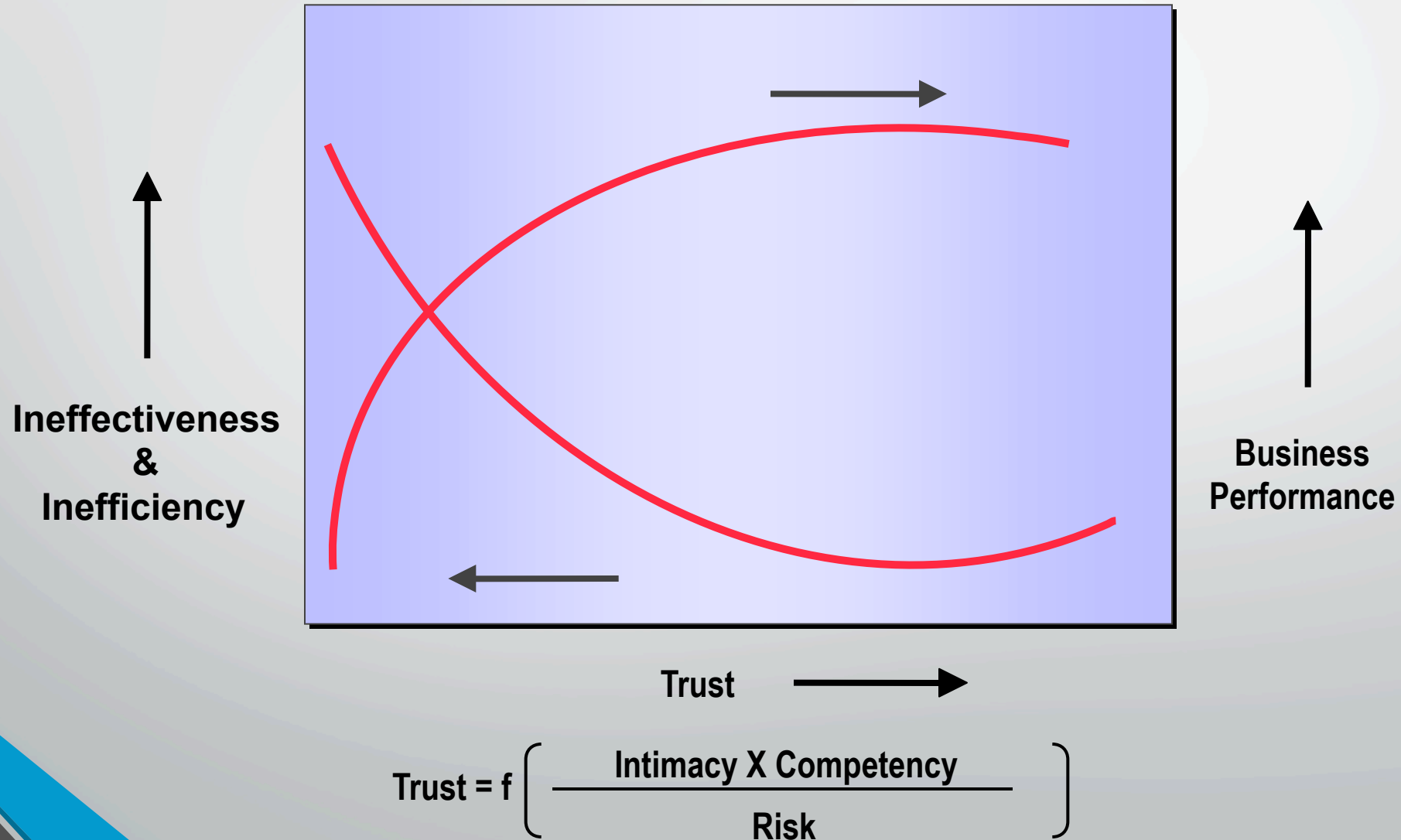


# Reflections...

# **Delivering Business Success...**

- **Data....f (Inputs)**
- **Information....f (Data)**
- **Planning....f (Information)**
- **Successful Projects....f (Planning)**
- **Successful Businesses...f(Successful Projects)**

# Project Performance / Trust Relationships







**Q&A**

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