

The Physics of Research Teams

By

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Technology"***

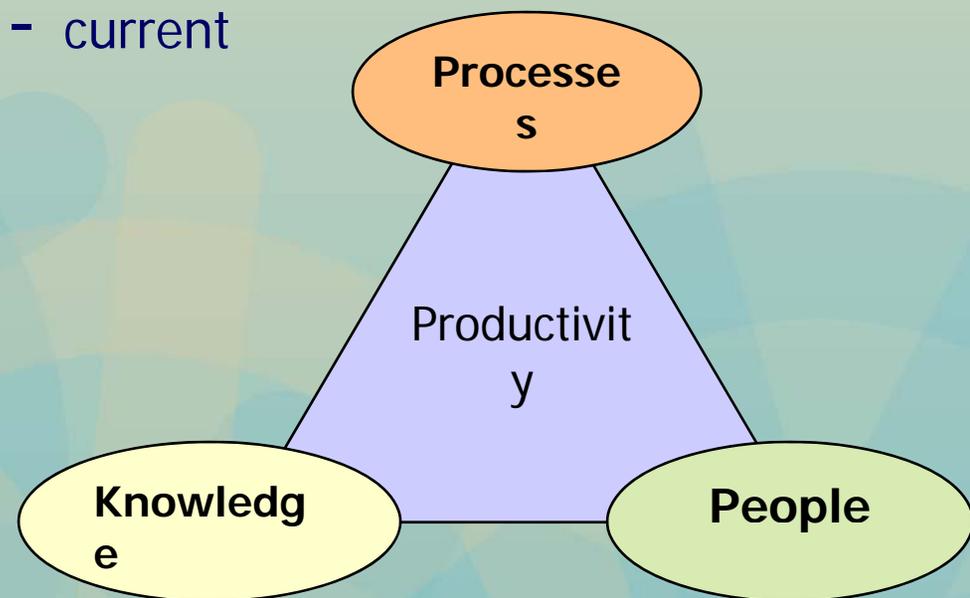


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SNL Studies to Date

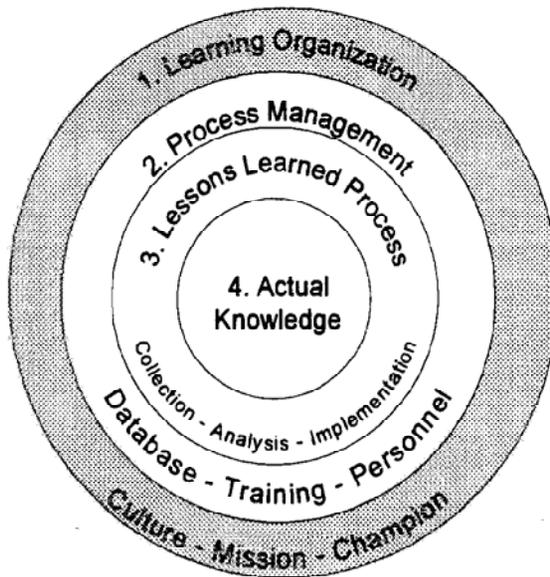


- (1) PROCESSES (CII) – mid to late 1990's
- (2) KNOWLEDGE (UNM) – early 2000's
- (3) PEOPLE (GHI) - current

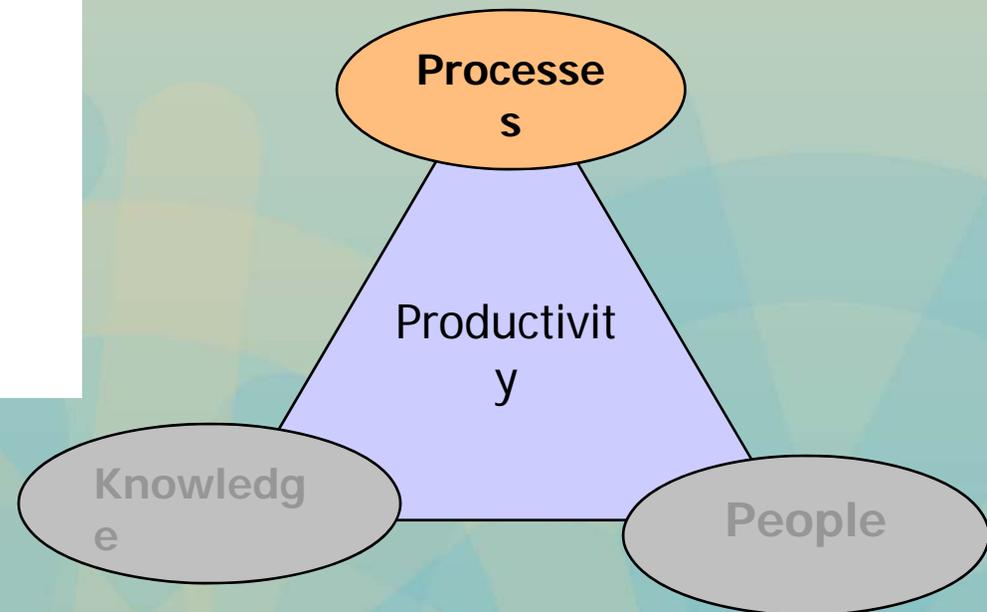


(1) Process (CII)

Modeling the Lessons Learned Process



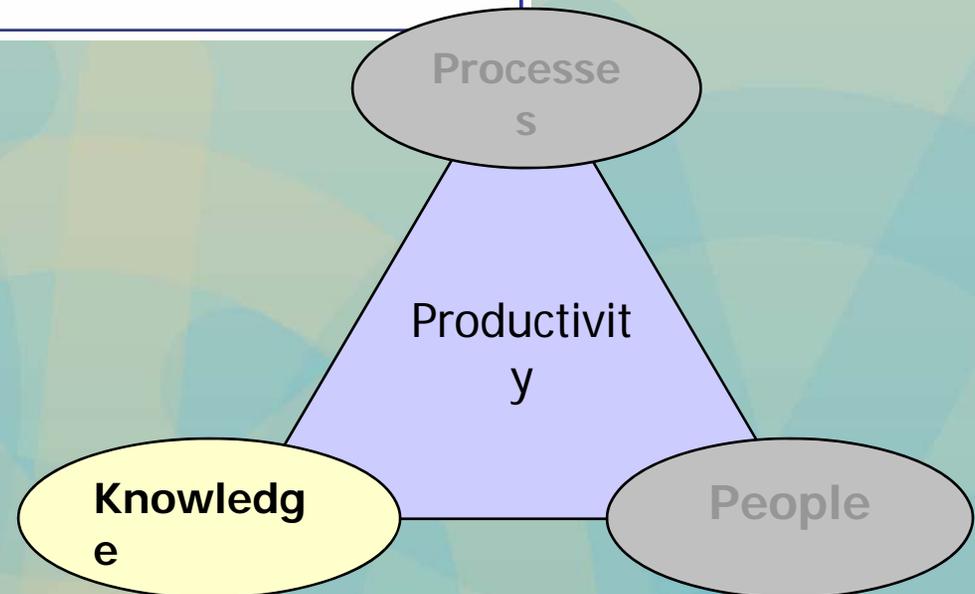
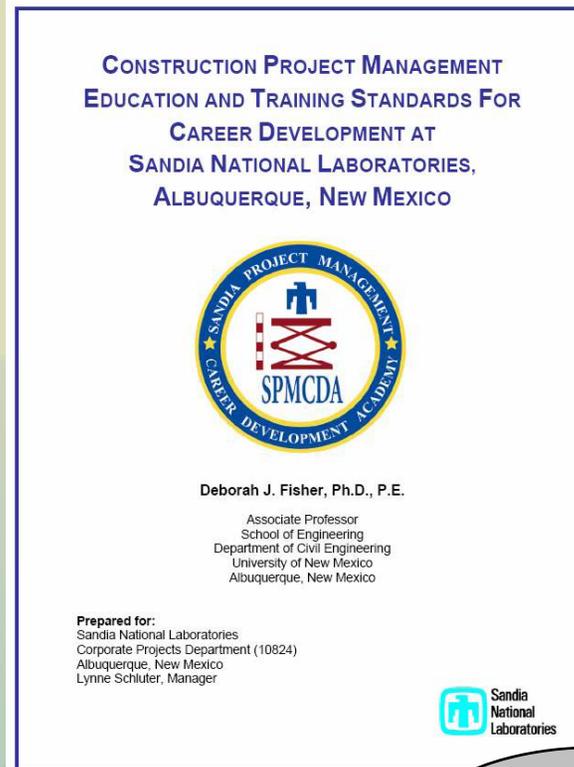
(1) LLP Model



(2) KNOWLEDGE

Objectives:

- *Advance SNL's Current State of PM to World-class Standards*
- *Measure SNL Against These Standards for Accountability*

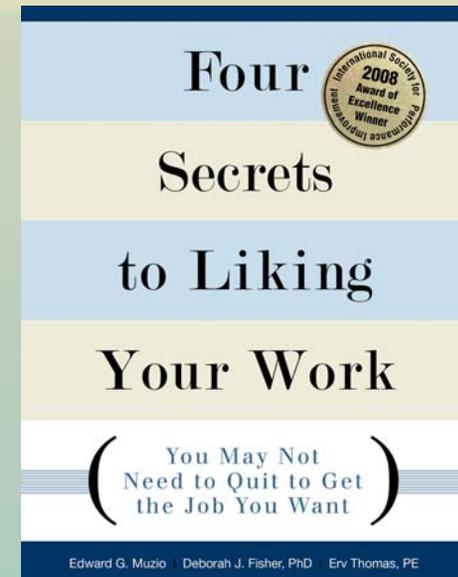
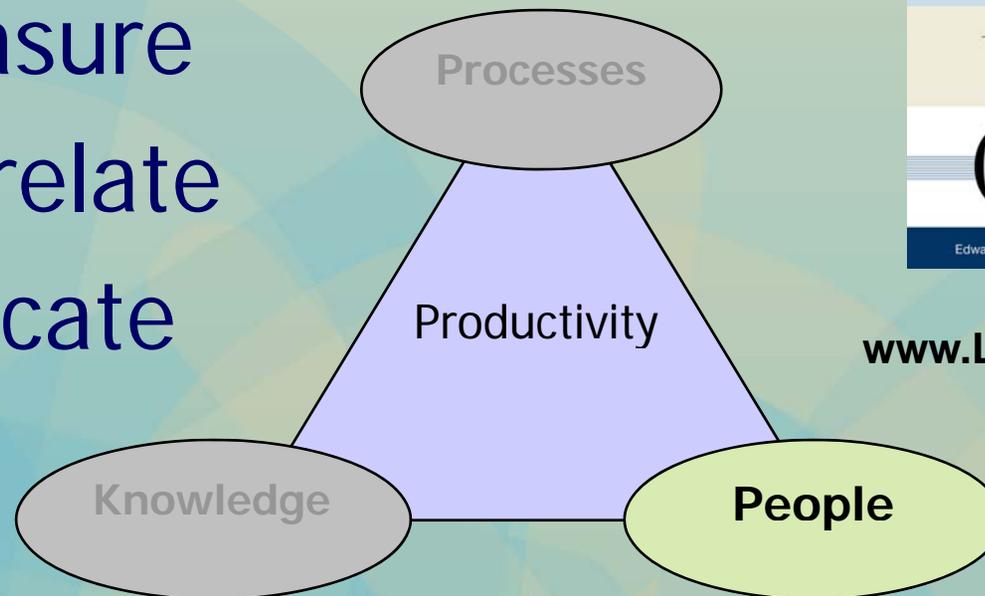




(3) PEOPLE — *Soft Skill*

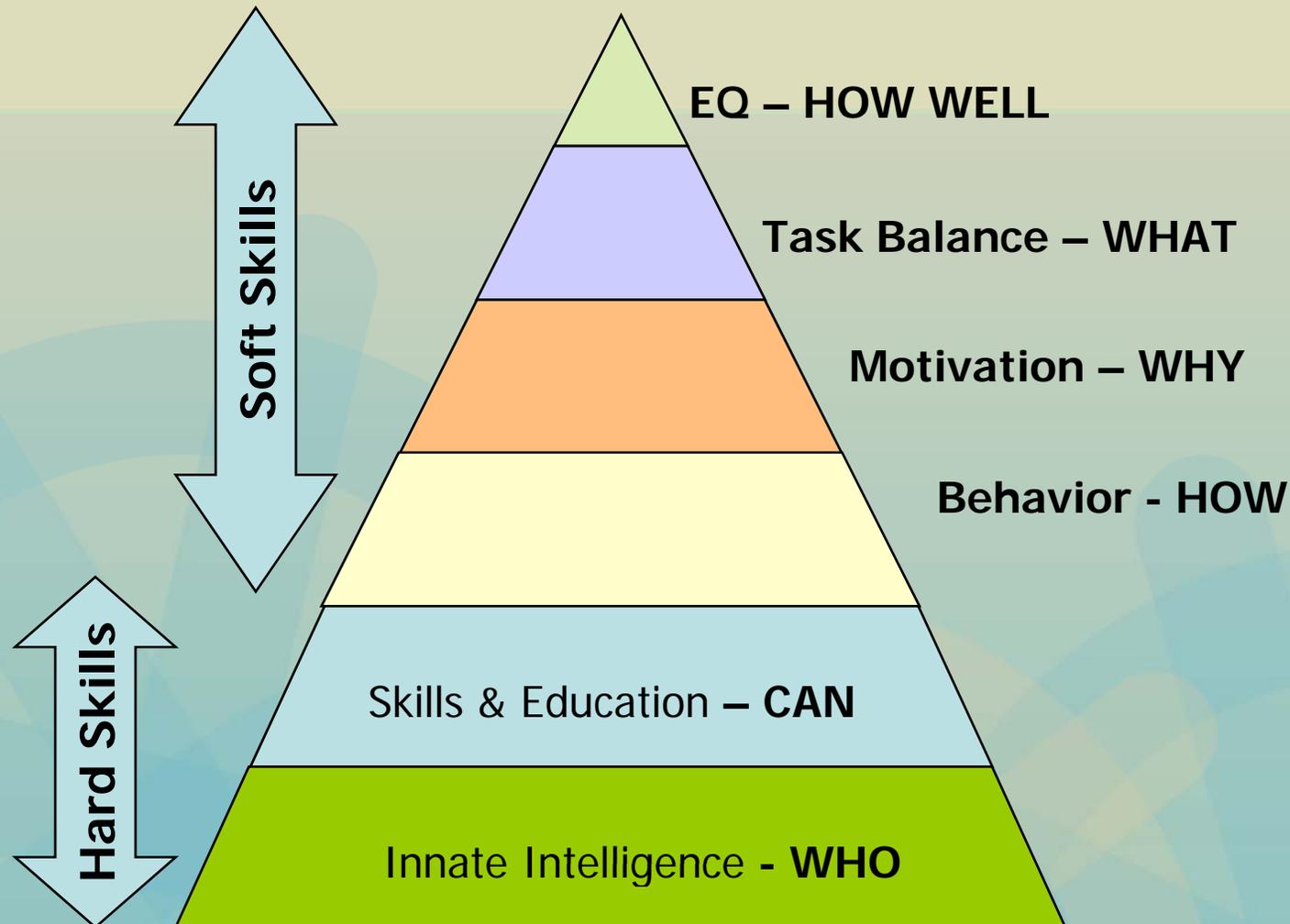
Quantification (SSQ)

- Research Steps
 - Measure
 - Correlate
 - Educate



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Fisher Hierarchy of Skills





1st SS Law - Behavior – How?

Task Focus

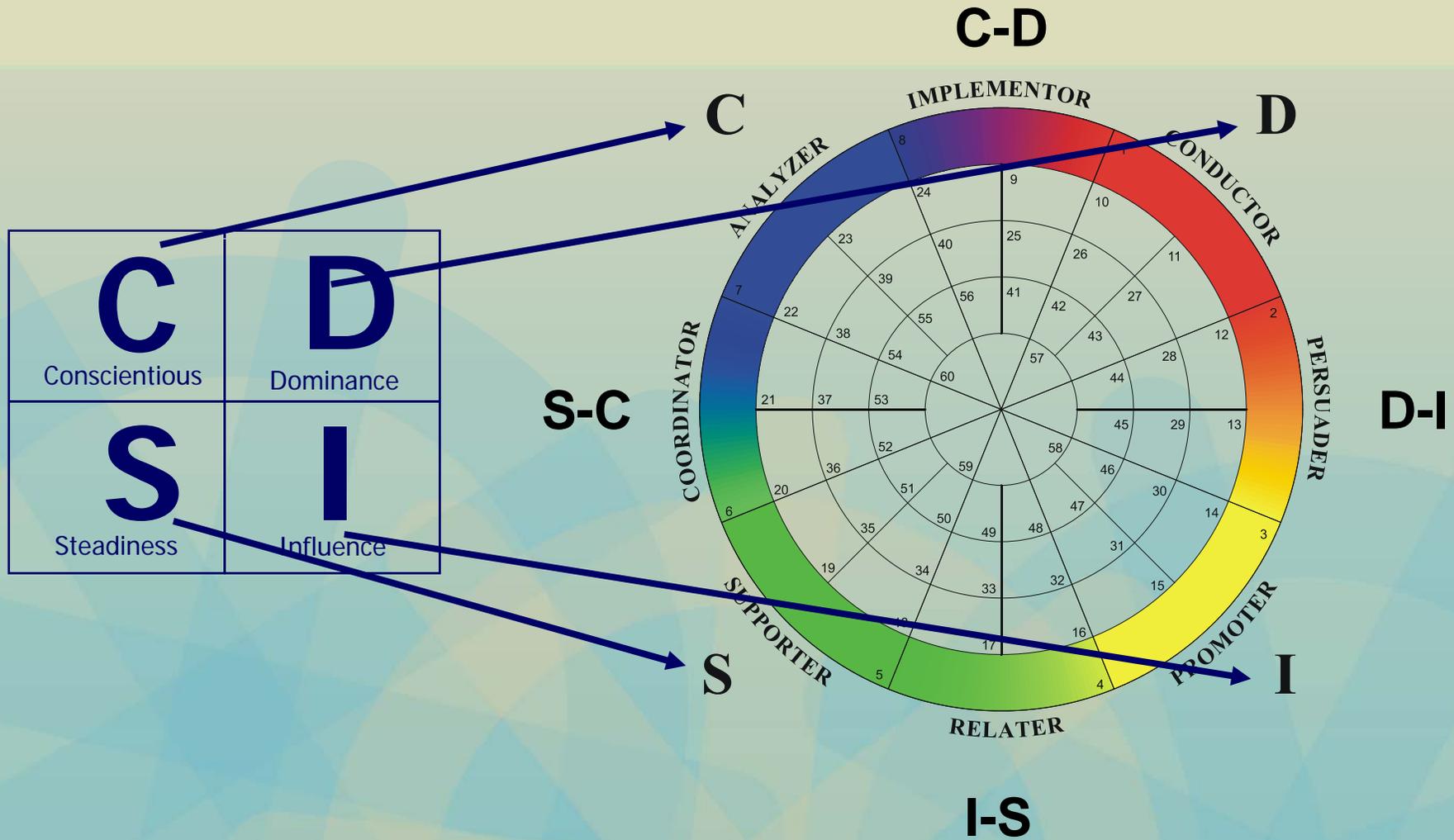
C	D
Conscientiousness "Constraints"	Dominance "Challenges"
S	I
Steadiness "Consistency"	Influence "Contacts"

Introverted/
Responsive
(Slow)

Extroverted/
Active
(Fast)

People Focus

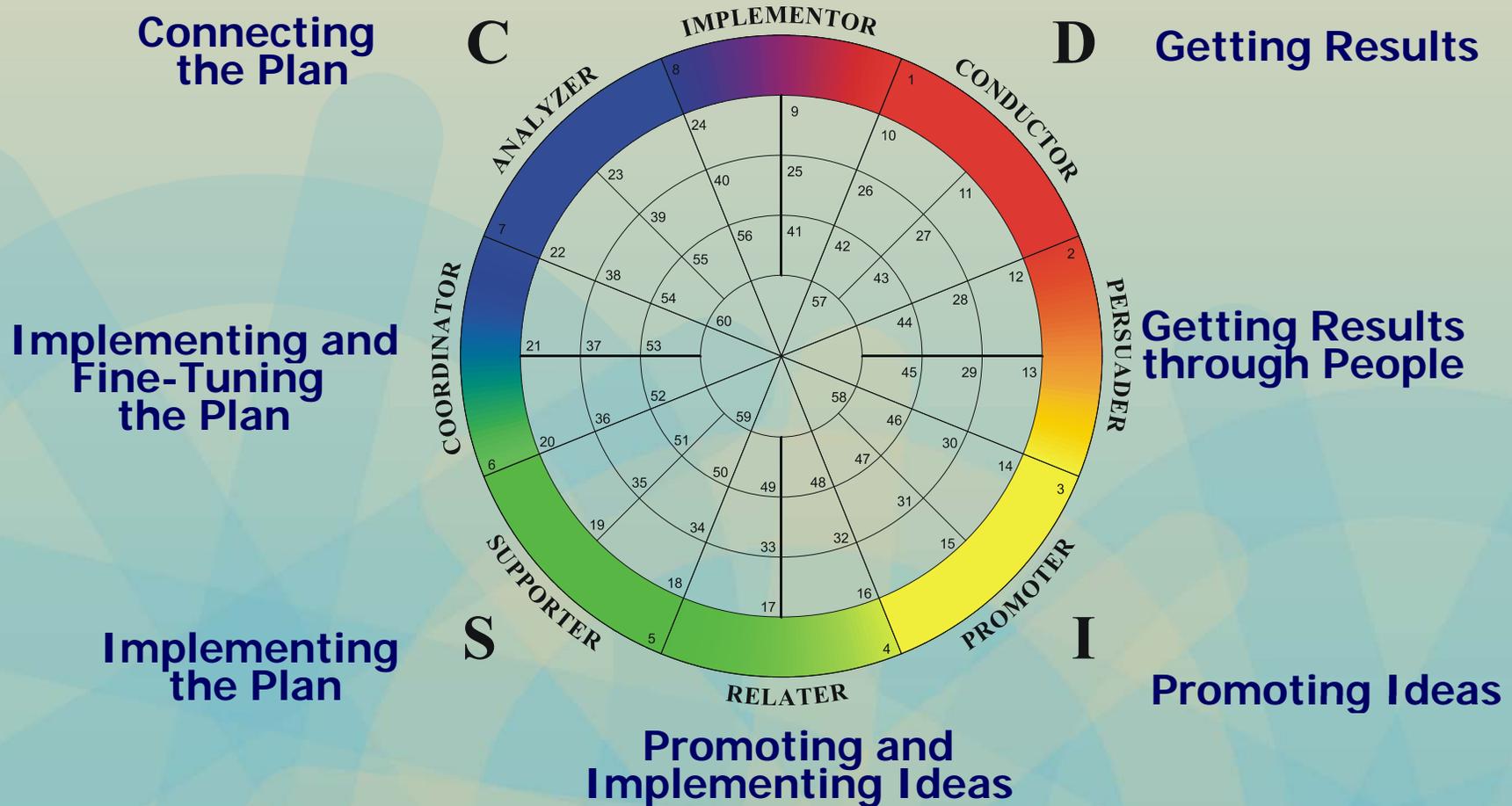
Map of Factors



Critical Interactions



Thinking and Implementing Creative Ideas



2nd SS Law - Motivators – Why?



	Invisible	Visible
Task	Truth	Results
People	Power	Assistance
Process	Form	Structure

Motivation needs



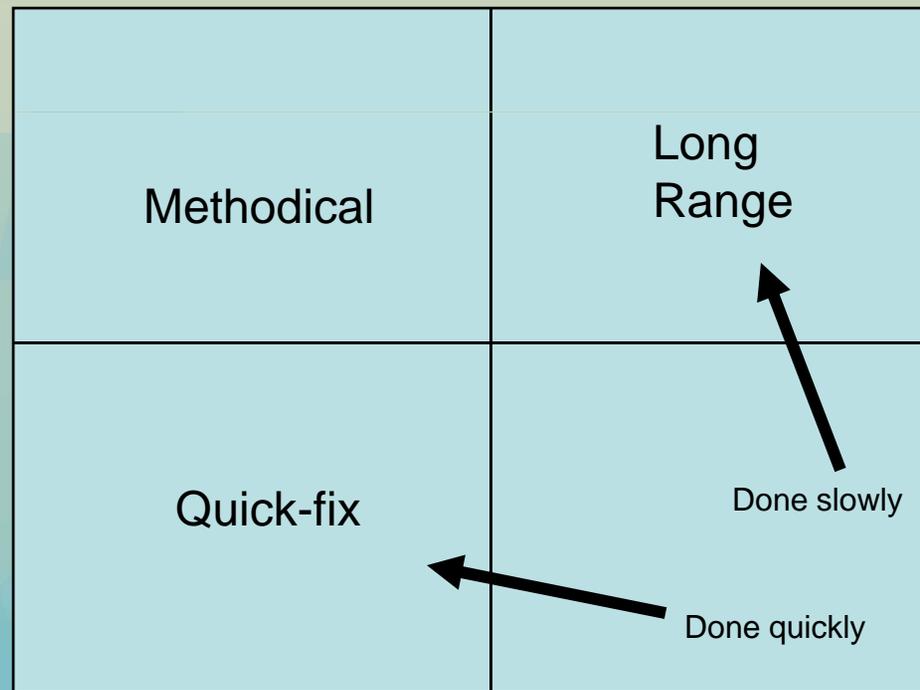
- Truth – to learn
- Results – to invest resources wisely
- Power – to be in control
- Assistance – to help others
- Form – to be in a positive, subjective surrounding
- Structure – to follow a consistent framework



3rd SS Law - Task Balance –What?

Anticipated

Immediate



Deliberate

Unforeseen

Task Balance Needs



- Methodical – focus on routine tasks, slow down
- Long-Range – focus on broad issues, work systematically
- Quick-Fix – put out fires, troubleshoot

4th SS Law - Emotional Intelligence (EQ) – How Well?

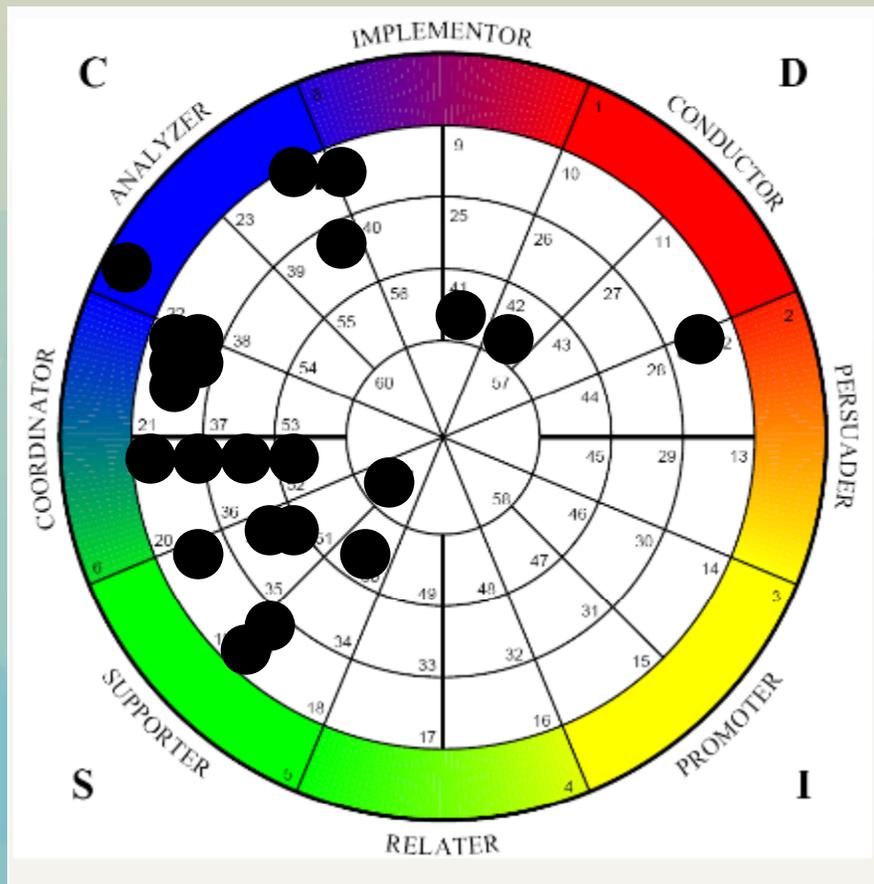


	Invisible	Visible
Task	Understanding Problems	Planning For Results
People	Human Awareness & Attitude	Interaction & Relationship
Process	Intuition & Awareness	Organization & Focus

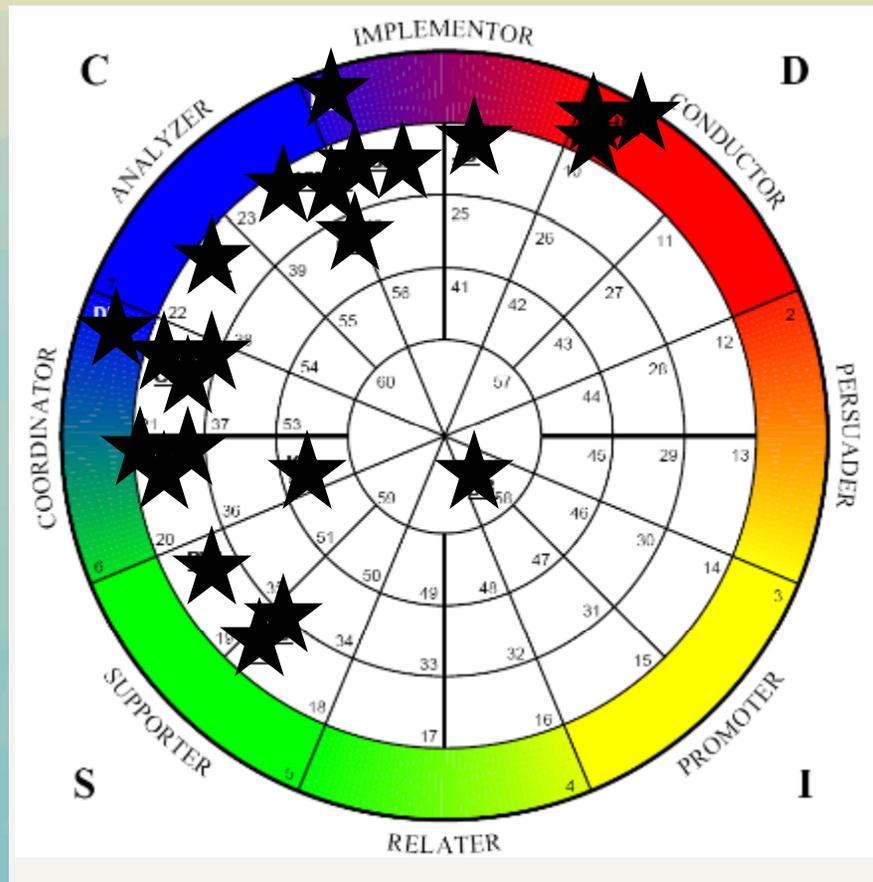
Application Example

1st SS Law - Behavior

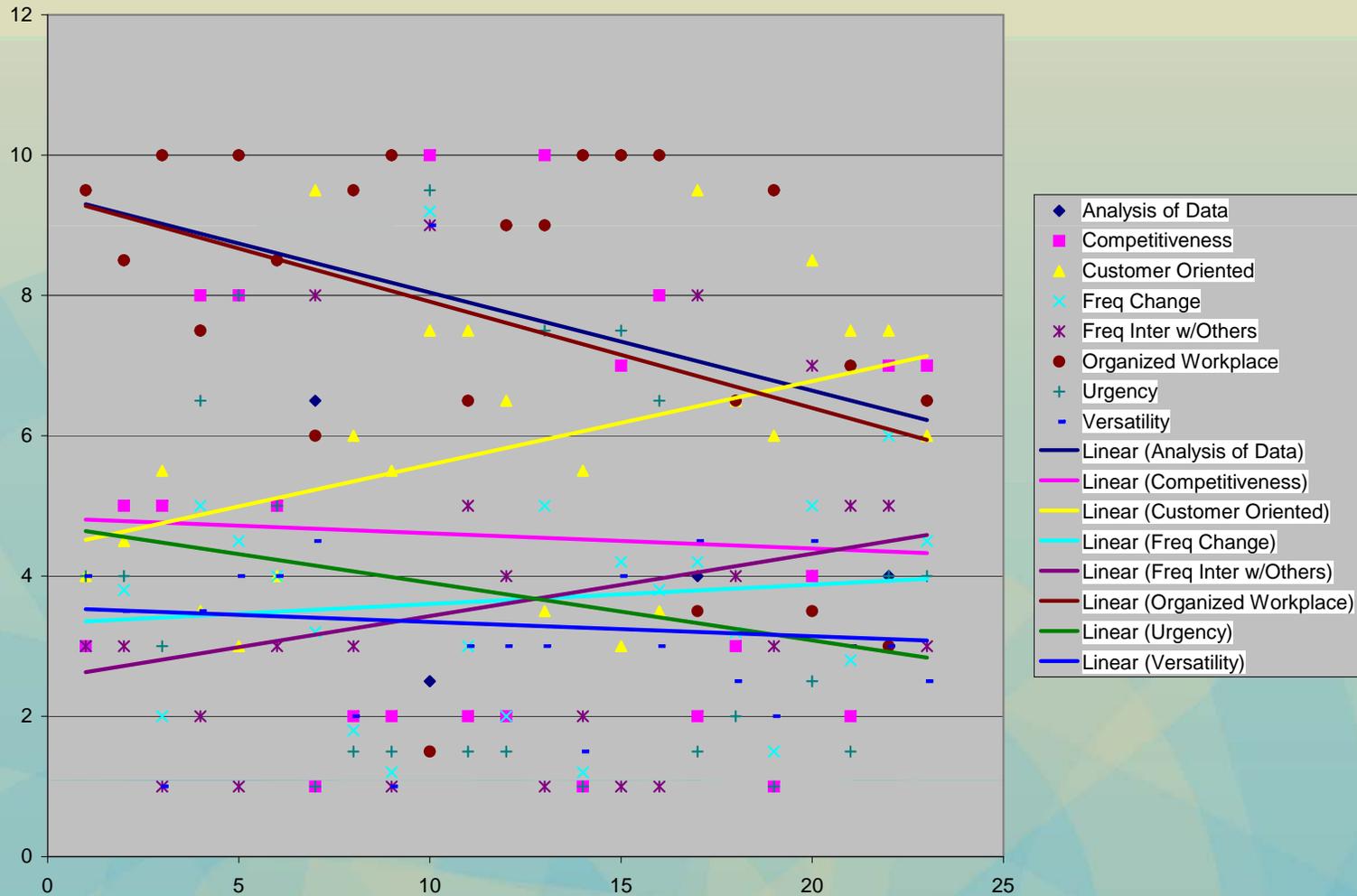
Natural Behavioral Style



Adapted Behavioral Style



Behavior Performance Trends: Workplace Behaviors

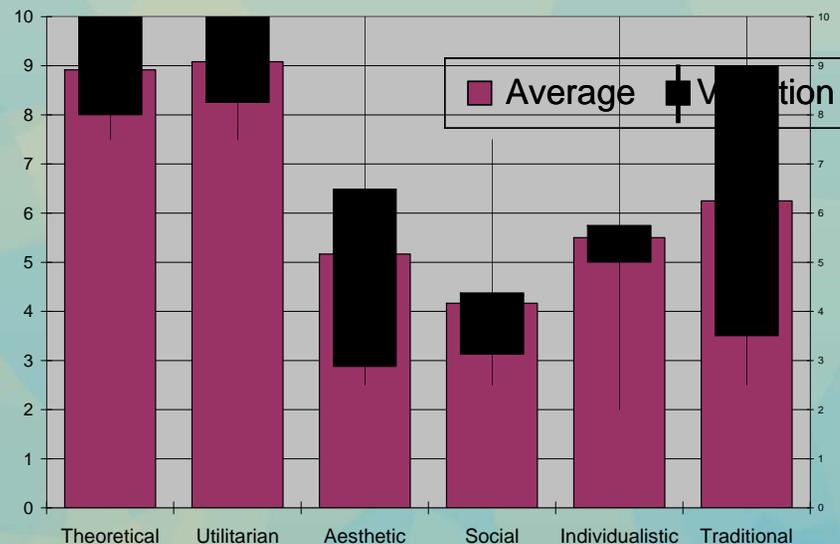
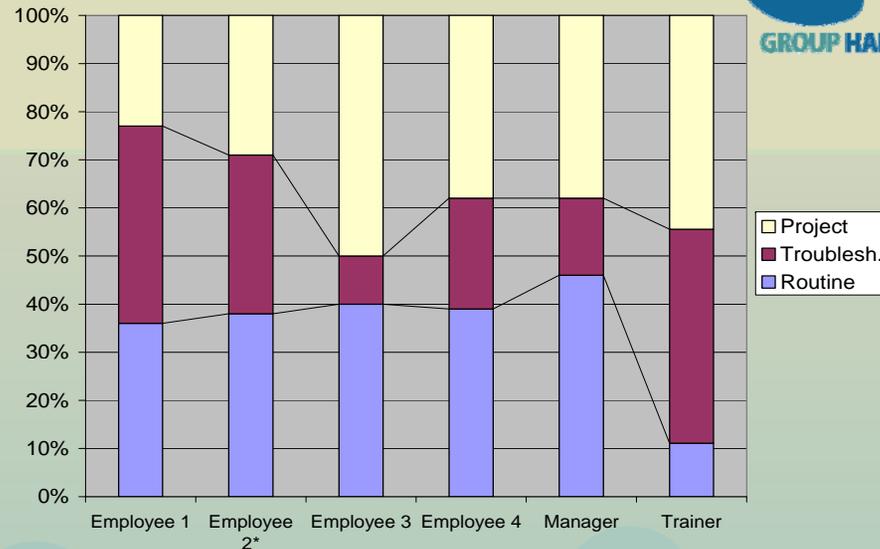


Application Examples

2nd SS Law –Motivators; 3rd SS Law - Task Balance



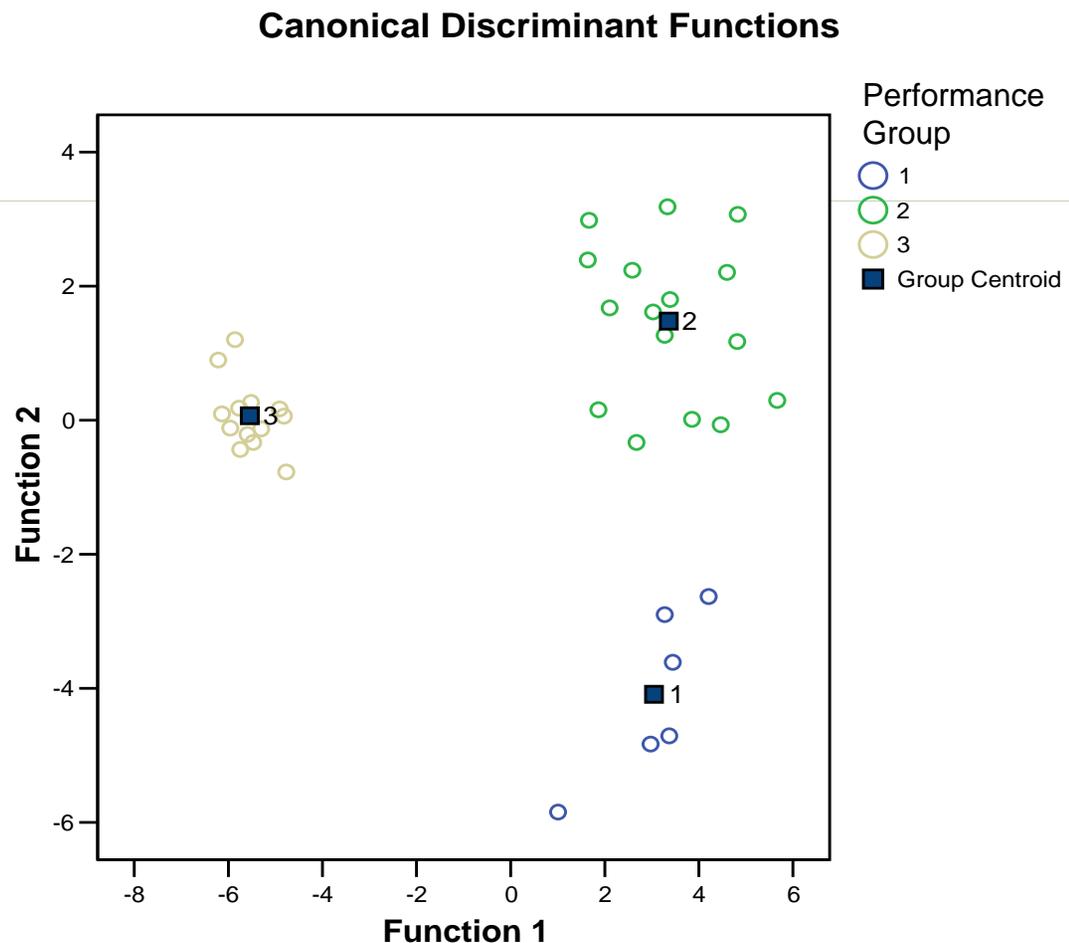
- Pre hire screening
 - Candidate vs. High Performers
 - Candidate vs. Job Definition
- Existing teams
 - Strengths
 - Blind spots
 - Conflict mitigation
 - Performance analysis



Application Example: All Laws
Mathematical compilation of ~100 factors
(behavior, motivation, task balance, EQ)



- Discrimination among performance levels
- Single-function discrimination of low vs. high performers



How Use SS Physics?



- Become familiar with Four SS Laws of People Physics
- Know Yourself (where do you fit?)
- Understand Others on Your Research Team
- Adjust Your Demeanor to Align with Others in Order to Better Communicate and Influence



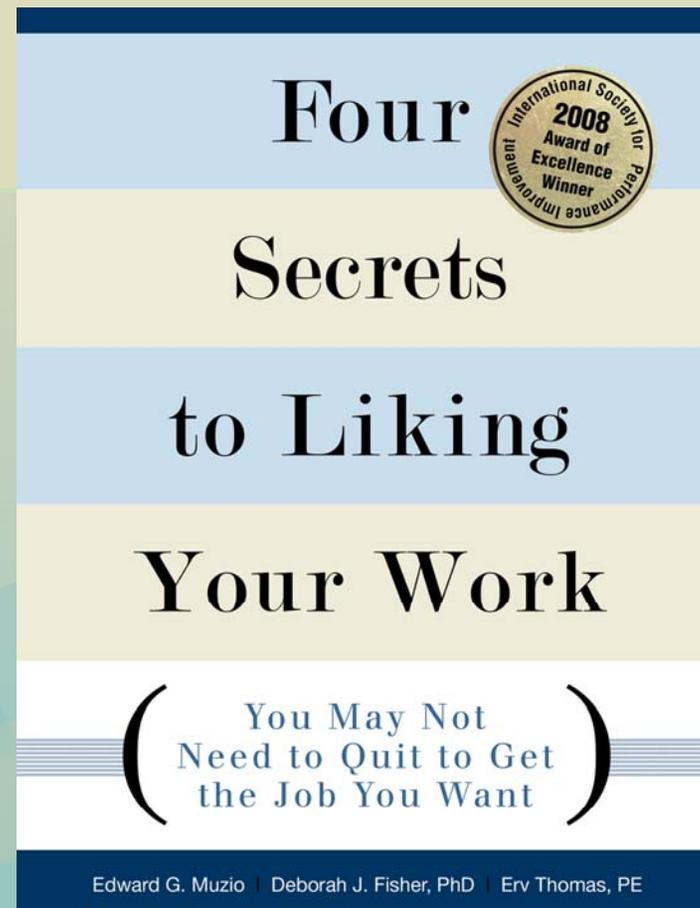
Why Use SS Physics?

- Enhance Communication
- Improve Morale
- Increase Performance, Outcomes
- Reduce Attrition/Turnover

Implementation steps:

- 1) Sign up for free newsletter
- 2) Read the book
- 3) Know yourself
- 4) Understand your research team

Questions?



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