

A Veteran-Owned Company

*** Lean Six Sigma and the Project Management Professional:
Dealing with Chaos, Human Constraints, and Planning for Their Mitigation**

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before the

PMI WDC and PMI CVC
Quantico and Fredericksburg Outreach Group

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PRESENTATION OUTLINE

I. Introduction

A. Objective

To foster a discussion on an alternative approach to utilizing the cross-disciplines of Project Management (PMI), Six Sigma, Lean, and their related tool-sets.

B. My Background

1. Private Mediator & Conflict Analyst:

- a) Lefcowitz & Vogler, Partner
- b) President, Pittsburgh Chapter, SPIDR (Society for Professionals in Dispute Resolution).
- c) Non-Attorney Member, Pennsylvania Bar Association, Committee on Alternative Dispute Resolution

2. MS Access and Oracle Developer

3. Program/Project Manager and Operations Researcher and Systems Analyst (ORSA), Senior Data / Business Analyst:

- a) Lead Consultant/Project Manager, Peridot Solutions, LLC
- b) MCL & Associates, Inc., CEO

C. Thesis Statement

- Projects – any project – succeed or fail because of people – what I call, Human Constraints – not tools.
- Tools – when they are appropriately selected – can only make mechanical tasks less difficult. They do not directly address Human Constraint issues, although they are often marketed that way.

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- When inappropriately selected, tools – inversely – make mechanical tasks less effective and less effective through waste, and thereby exacerbate Human Constraint issues through unrealistic conflict.
 - This increases the likelihood of project failure to the point of almost certainty.
- II. Overview: Project Management, Six Sigma, and Lean
- A. What does each of these disciplines do? What is their value?
1. Project Management: Risk
 2. Lean: Waste
 3. Six Sigma (6σ): Conformity to Quality / Minimizing Deviation
- B. What is their assumption base; i.e., what do each of these disciplines assume to be true?
1. Project Management: Process leads inexorably to project success
 - a. Underestimation of staff wages, operating costs, equipment, supplies, third-party procurement needs and administrative costs
 - b. Creates a layer of bureaucracy and documentation
 - c. Overhead: Cost / Communication / Time
 - d. Obsession: Methodology / Process / Stakeholder Satisfaction
 - e. Counter-Creative Problem-Solving
 2. Lean: Individuals : All constraining processes have realistically measurable cycle times
 - a. Is that true?
 - b. What are some instances where that is not true?
 - i. Policy-based Procedures (different interpretations)
 - ii. Business Rules (different circumstances)
 3. Six Sigma (6σ): Conformity to Quality\ Leads to ROI; there is a relationship between the Cost of Poor Quality (COPQ) and the Process Sigma Quality Level.
 - a. Presumes reasonably good data; in reality data usual not very good and prioritization decisions are usually based upon subjective judgment
 - b. Not all defects are equally bad; i.e. they are not equal impact on the customer's needs or expectations.
 - c. Counting the number of Black Belts and Green Belts, number of projects completed is not the same as bottom-line savings.
 - d. Six sigma training was marketed as a panacea solution, when in fact it was training designed to produce customer entrée.
 - e. In fact, no alternatives to the strict GB/BB/MBB approach have been tested.
- C. Static and Dynamic Environments?
- D. Mechanical or Cognitive Tasks?
- E. Bibles or Cook Books?

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- III. Human Constraints in Projects; What Are They? Why Do They Matter?
 - A. The Nature of Human Condition?
 - 1. Fight-Freeze-Flight
 - 2. Obedience to Authority (Milgram, 1974)
 - 3. Xenophobia
 - 4. Mirror Imaging (White)
 - 5. Egocentric Universe /Survival Instinct (Self-Interest)
 - B. Functional and Dysfunctional / Rational and Irrational Conflict
 - 1. Functional and Dysfunctional
 - a. Conflict theory distinguishes between functional and dysfunctional conflict.
 - b. Conflict is not always bad. It provides a beneficial functional purpose, and therefore is not necessarily dysfunctional.
 - c. For example, business conflicts over scarce resources or tight timelines for deliverables may act as a catalyst for new ideas that result in more efficient, more cost-effective, and less time-consuming methods.
 - d. Conflict often forces members of a group to think “outside the circle” for new solutions.
 - 2. Rational and Irrational Conflict
 - a. Conflict theory, too, distinguishes between conflict that is “rational” and conflict that is “irrational”.
 - b. Rational conflict ceases, “if the actor can find equally satisfying ways to achieve his end.”
 - c. For irrational conflict, however, there are no alternative outcomes, because the actor’s conflict objective cannot be satisfied with its successful attainment.
 - d. An irrational conflict is always dysfunctional, because it invests resources in an outcome that can never resolve the real need motivating action.
 - e. However, rational conflict is not always functional.

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	<u>RATIONAL</u>	<u>IRRATIONAL</u>
<u>RATIONAL</u>	<ul style="list-style-type: none"> •Negotiation • Joint Planning 	<ul style="list-style-type: none"> •Mediation •GRIT • Superordinate Goals
<u>IRRATIONAL</u>	<ul style="list-style-type: none"> •Mediation •GRIT • Superordinate Goals 	<ul style="list-style-type: none"> •Force •Arbitration

C. Return on Investment (ROI)

1. The Cost / Time (Schedule) / Performance (Scope) Triangle → Quality
2. The Quality / Cost (Schedule) / Performance (Scope) / Quality Diamond → Expectations

D. Neil Rackham: SPIN (Situation, Problem, Implication, Need-Payoff)

E. Voice of the Customer: Whose ROI are We Talking About Anyway?

F. What Kind of Human Constraints Exist on a Project?:

G. Why Do Projects Fail?

My Assumption May Not Be Right, But I Have the Constitutional Right to Fail

1. John Bergey, et al
2. The Standish Group Chaos Report
3. Roger Sessions: “The IT Complexity Crisis: Danger and Opportunity”
4. Dynamic Markets report: IT Projects: Experience Certainty
5. ESI PMO Blog, “Top 10 Project Management Trends for 2012” , argues that Collaboration Gains Importance as Project Complexity Grows
 - a. Program management will gain momentum, but resources remain in short supply
 - b. Collaboration software solutions will become an essential business tool for project teams
 - c. Learning transfer will become the new mantra, but with little structured application

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- d. Agile blends with waterfall for a new “hybrid” approach
 - e. Smarter project investments will require a stronger marriage between project management and business process management (BPM)
 - f. Internal certifications in corporations and federal agencies will eclipse the PMP®
 - g. More PMO heads will measure effectiveness on business results
 - h. Good project managers will buck unemployment trends
 - i. Client-centric project management will outpace the “triple constraint”
 - j. HR professionals will seek assessments to identify high-potential project managers
- H. The Waiting for Gadot Syndrome: Not Thinking Outside the Box
- IV. The Skill-Set/Dilemma
- A. Individual Learning Styles
 - B. The ROI of Skill Set Acquisition
 - C. Focusing on Mentoring ,Team Building, and Skill Sets
 - D. Peer-to-Peer Training
 - E. Making Everyone a Leader in Something
- V. Common Skill-sets / Common Tools
- A. Attitude and Leadership
 - B. Basic Understanding of Conflict Models and Conflict Analysis
 - C. Basic Understanding of SPIN
 - D. Understanding and Insisting on SMART Objectives:
 - 1. Specific: Identifying a specific action or event that will take place.
 - 2. Measurable: Outcomes should be quantifiable.
 - 3. Achievable: Attainable given available resources.
 - 4. Realistic: The probability for success must be high (i.e., all high and medium risks must be identified and a realistic mitigation plan identified).
 - 5. Time-Based: The solution must have a specific period of time associated with it.
 - E. Basic Understanding of “Voice of the Customer and SIPOC
 - F. Basic Understanding of Business Analysis, Data Gathering Procedures, Statistical Methods:
 - 1. Basic Business Analysis Skill Sets
 - 2. Database Structure and Data Scrubbing techniques
 - 3. Statistical Methods:
 - i. Random Selection and Levels of Confidence
 - ii. Statistical Probability, and Variability Concepts
 - iii. Understanding the Difference Between Correlation and Causality

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- iv. Inexpensive Software (e.g., QI Macros and R)
 - G. Problem-Solving (Thinking Outside the Box):
 - 1. Emphasizing improvisation and making-do with what you have
 - 2. Knowing what you assume, knowing what you know, knowing what you don't know
 - 3. Emphasis on agility
 - 4. Kiss
 - 5. Context
 - 6. Choosing the tools only after the approach to solving the problem has been selected
 - 7. Establish specific go-no go and trip-wire metrics that are smart
- VI. Summary
- A. We live in a dynamic work environment that requires agility
 - B. Most projects are cognitive rather than mechanical
 - C. Organizations are not monolithic entities
 - D. Individuals make decision based primarily upon role and self-interest criteria
 - E. Human constraints, in all its complexity, are the primary reason projects fail
 - F. Project success depends upon blending the right approach (understanding the right problem), with right training mechanism, with the right sets of tools, and a human constraints mitigation plan that how to get everyone on-board the bus (one-person-at-a-time).
 - G. Human Constraints Are the Primary Risk, Requiring a Human Constraints Mitigation Plan

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