

A photograph of a man with dark hair, wearing a green long-sleeved shirt, looking down at a small electronic device he is holding in his hands. The device appears to be a small circuit board or a component of a larger system. The background is a bright, out-of-focus indoor setting.

Delivering Successful Projects with TSP

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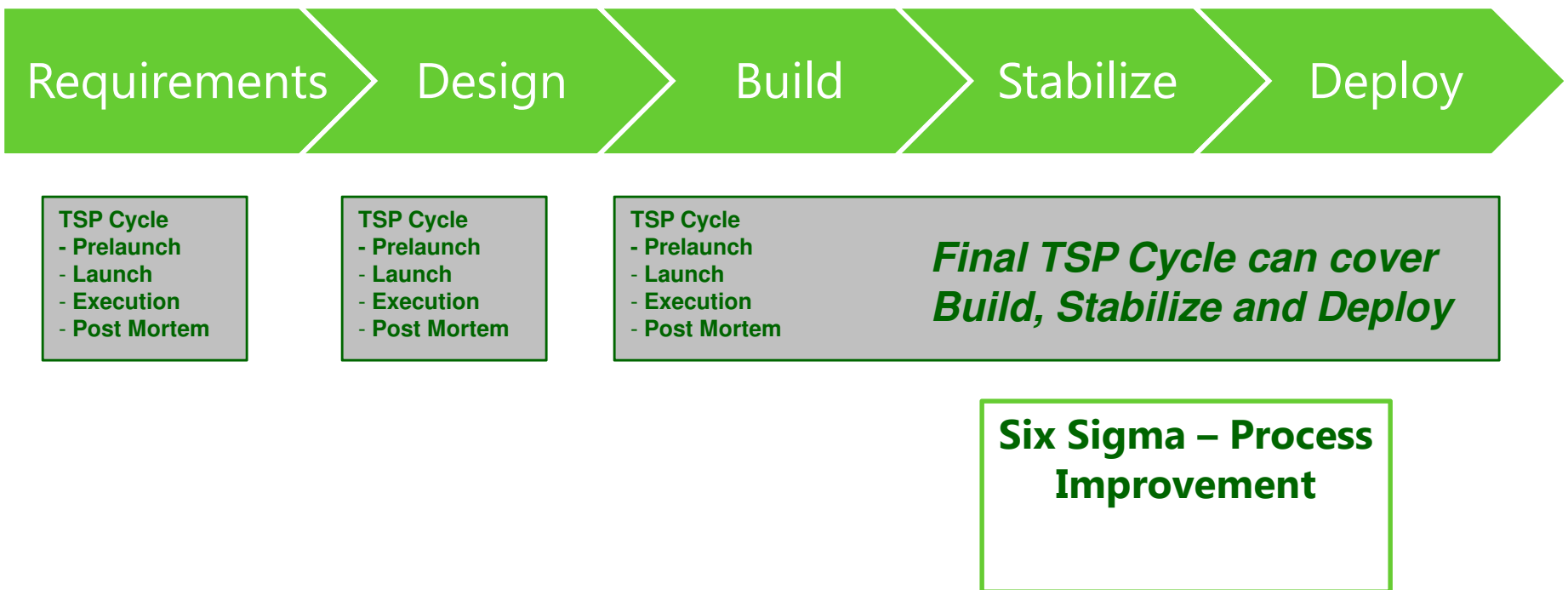
Agenda

- Overview
- Methodology Selection
- Golden Triangle
- Metrics
- Post Mortem
- Key Messages

Microsoft IT Context

- Global teams – primarily in Redmond, India and China
- Roughly 10,000 people
- Approximately 200 projects annually
- 260 TSP projects since 2002
 - Typical team 12 - PM, Dev, Test
 - Largest 37
 - Full SDLC – TSP goal is to start with Requirements

TSP is part of the overall project execution process



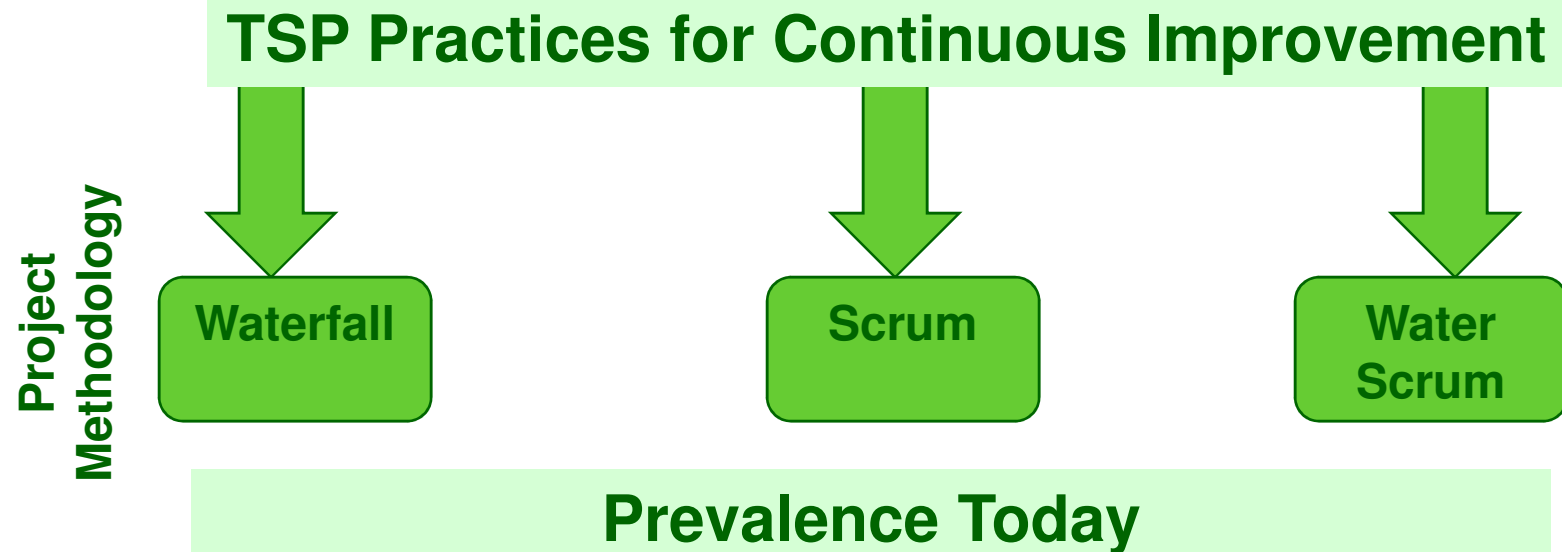
Global Coaching Model

- Coaches follow uniform model across regions
- Coaches coach and launch locally
- Provide TSP, Scrum and Inspection Coaching
- Share learning via Wikis and Blogs

Project Staffing

- Originally: Mixed Geography with shared responsibility
 - Result – many late nights!
- Now: Single Geography with local responsibility
 - Result – fewer late nights!

Methodology Summary



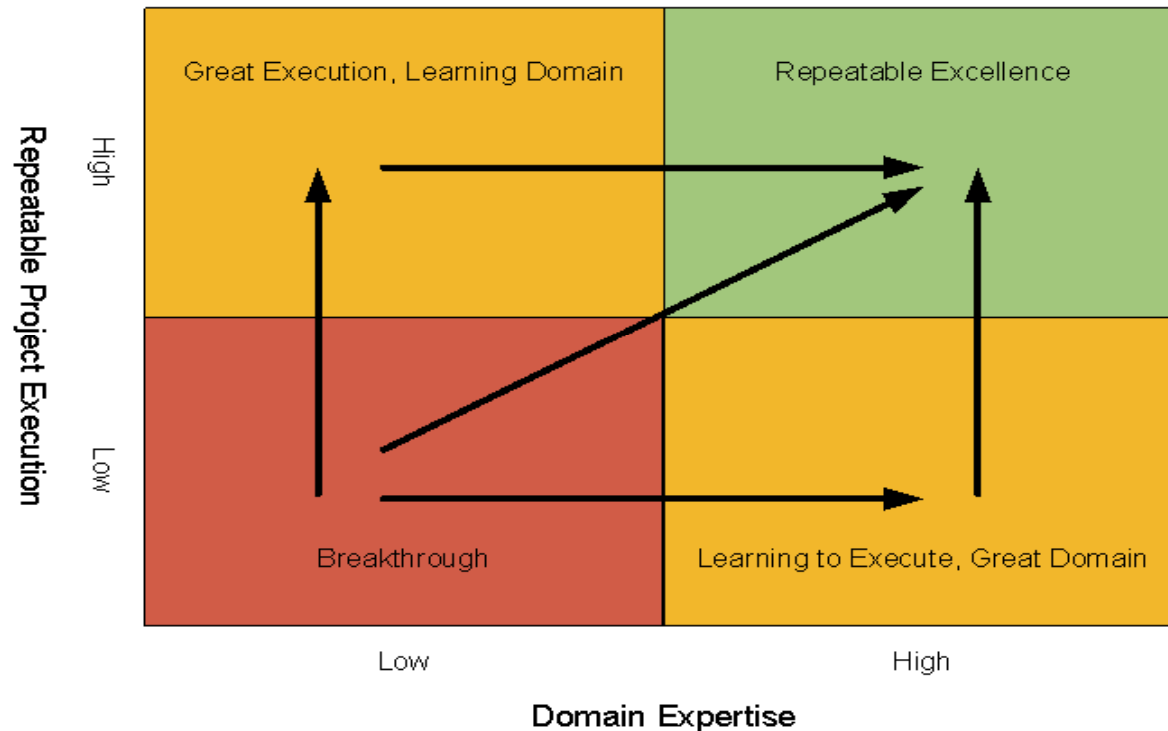
Rough MSIT Prevalence

- Waterfall = 90%
- Scrum = 5 %
- WaterScrum = Emerging

Role of TSP

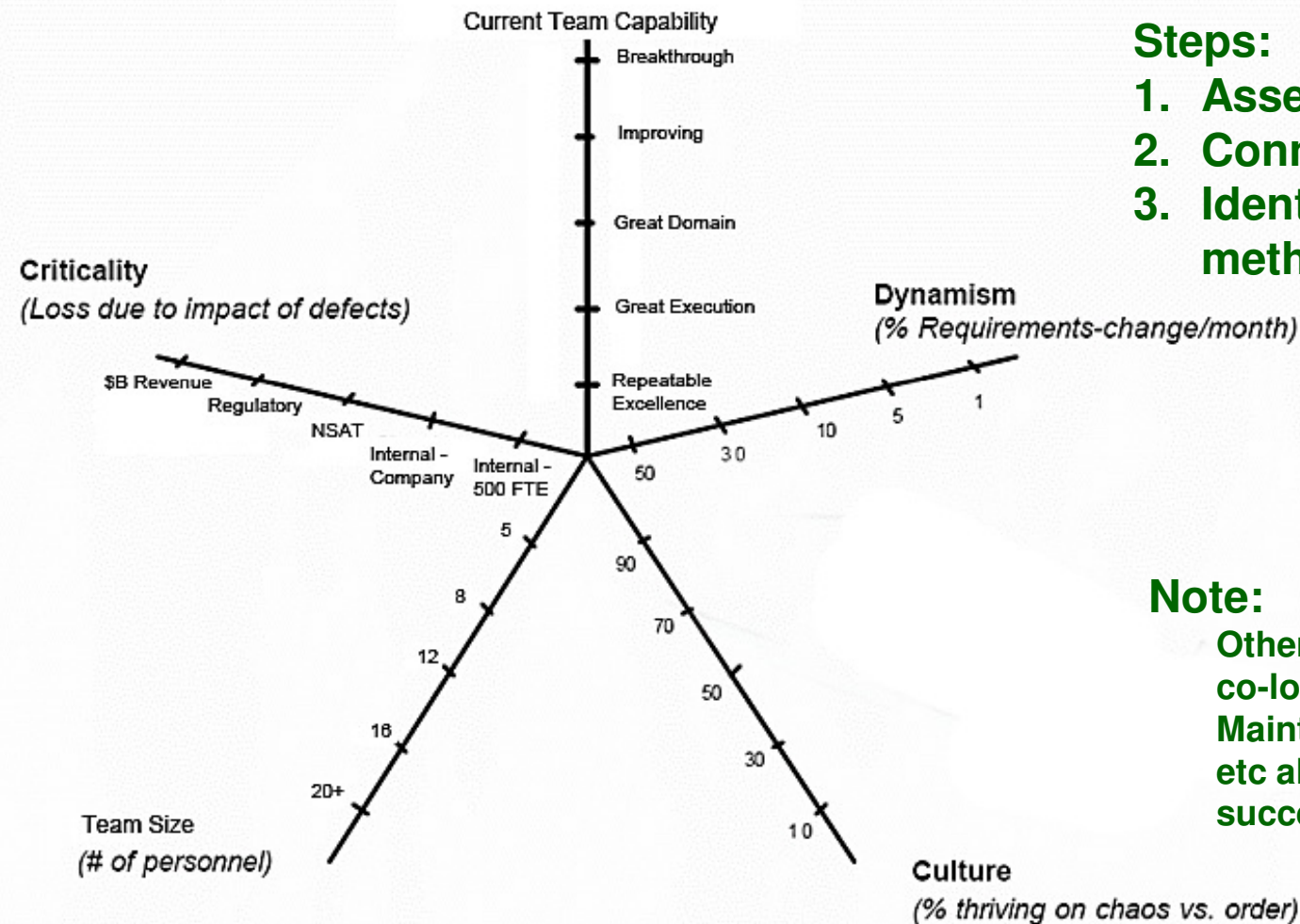
- Planning and tracking improves Size & Effort Estimates and Quality
- Improves Work/Live Balance
- Creates a Self Directed Team

Project (COE?) Capability Assessment



Based on: Project Categorization, Prioritization, and Execution based on Six Sigma Concepts: A Case Study of Operational Improvement Projects March 2007 Project Management Journal

Methodology Selection – MS V2



Steps:

1. Assess each category
2. Connect marks
3. Identify primary methodology and risks

Note:

Other factors – co-location, V1 vs Maintenance & Enhancement, etc also contribute to project success

Source: *Balancing Agility and Discipline: A Guide for the Perplexed* (Addison Wesley, 2003)

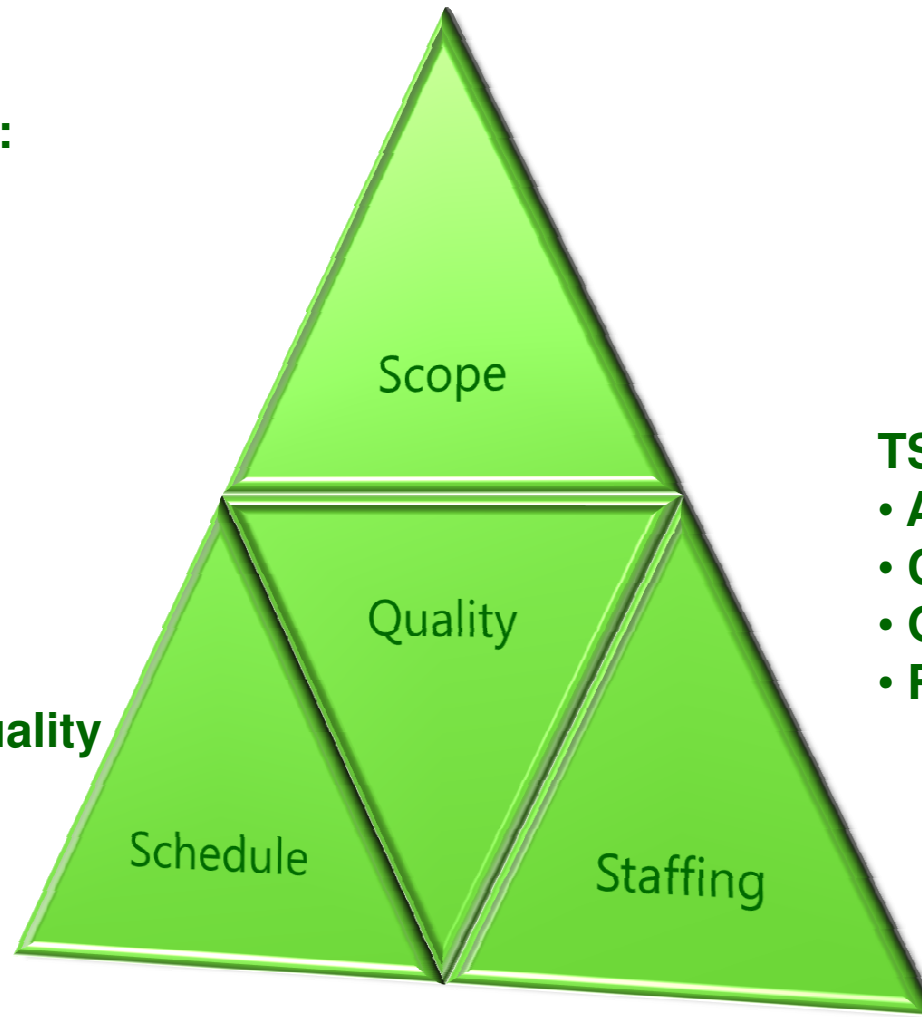
Golden Triangle

IT users' feedback:

- Too slow;
- Too expensive

Team Pressure:

- Fixed Scope;
- Fixed Schedule
- Fixed Staffing
- No mention of quality



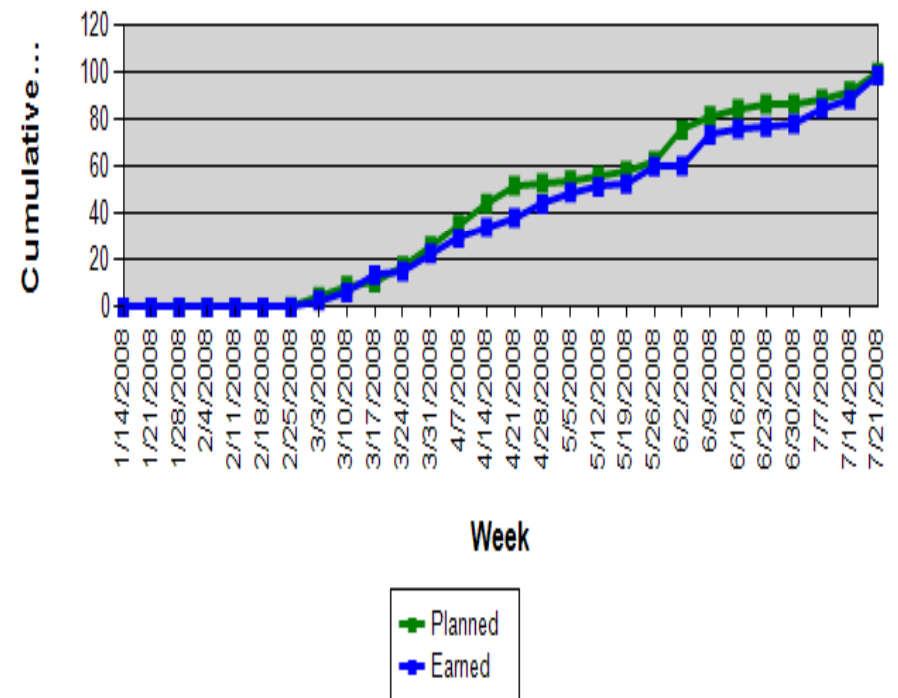
TSP:

- Achievable Schedule;
- Clear Scope
- Quality Plan
- Realistic Staffing

Earned Value

Week	Planned Value	Cumulative Planned Value	Earned Value	Cumulative Earned Value
2/25/2008	0.133	0.133	0	0
3/3/2008	4.199	4.332	2.826	2.826
3/10/2008	4.748	9.080	3.372	6.198
3/17/2008	1.466	10.54	7.387	13.58
3/24/2008	7.092	17.63	1.679	15.26
3/31/2008	8.307	25.94	7.427	22.69
4/7/2008	9.411	35.35	6.772	29.46
4/14/2008	8.851	44.21	4.705	34.17
4/21/2008	7.758	51.96	4.212	38.38
4/28/2008	0.919	52.88	5.758	44.14
5/5/2008	1.333	54.22	4.972	49.11
5/12/2008	1.999	56.22	2.346	51.46
5/19/2008	1.999	58.22	1.333	52.79
5/26/2008	4.345	62.56	7.305	60.10
6/2/2008	12.87	75.44	0.159	60.26
6/9/2008	6.132	81.57	13.14	73.40
6/16/2008	2.986	84.56	2.559	75.96
6/23/2008	1.919	86.48	0.959	76.92
6/30/2008	0	86.48	1.279	78.20
7/7/2008	2.319	88.80	6.558	84.76
7/14/2008	3.359	92.16	3.759	88.52
7/21/2008	7.838	100	10.07	98.60

EV: Cumulative Plan vs. Actual



Time

- Task Time
 - Across 260 TSP projects
 - Average 11.8 tasks hours per week
 - Max achievable – 18
- Time Entry
 - 8,000 time entries
 - 3 “blocks” per day
 - 71 minutes average duration
 - 10 seconds to enter time = *TSP adds 30 seconds a day*

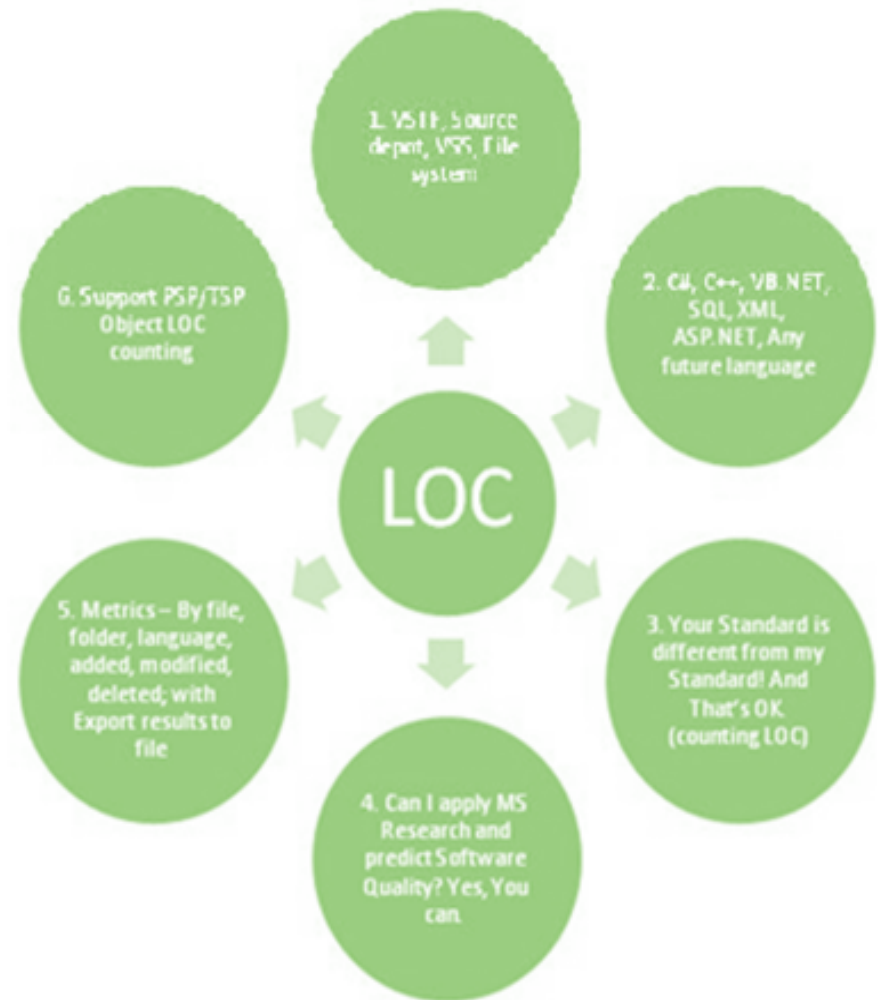
Defects

- Identify most defective modules
- Root cause analysis
 - Major issues in Test
 - Major production issues
- Source for pattern analysis across projects
 - Training opportunities – eliminate common defects

Over 20,300 major defects found prior to Test through TSP

Size

- Reluctance to count
 - Eliminates productivity and density analysis
- LOC Counter (free):
<http://code.msdn.microsoft.com/LOCCounter>
- *Helps predict test defect densities while still in build phase*



Work/Life Balance

All teams miss tasks in their plans...

Non-TSP Teams

- “Eat”, drop or bury the missing tasks
 - Long hours/weekends
 - Deploy with defects
 - Immediate production bug fix

TSP Teams

- Continuous re-planning
 - Tasks added
 - Detailed plans used to negotiate with Managers & Stakeholders
- Tasks available for reuse

Post Mortems

- Launch, Phase & Project Post Mortems
- Where the key learning occurs
 - Survey team members
 - Pull project data
 - Conduct Post Mortem
 - What worked
 - What must improve
 - Action items distilled for next launch
- Extrapolate Learning – for reuse across IT

Key Messages

- Marketing, Marketing, Marketing...(Why TSP?)
- Pre-Institutionalization
 - Removing barriers to adoption
 - Launch duration based on nature of project

Higher TSP Process Compliance  Better outcome

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