Ten Tips to Prematurely Terminate Your Measurement Process

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The Ten Tips

• Serve ambivalent leadership
• Nurture a culture of indifference
• Focus on budget and schedule
• Punish people for poor measurement results
• Take inappropriate corrective action around special and common cause variation
• Refuse to own it
• Decorate the walls with progress and operational metric charts
• Use inconsistent measurement definitions across teams
• Vacillate measurement interest
• Focus on tools and technology
• Ignore the psychology of estimating and decision-making
# 1 – *Serve Ambivalent Leadership*

- Attitudes may include:
  - Make me look good (I want to be a “poster child”)
  - Make us look good (but I still want to be the “poster child”)
  - Provide me with the numbers (that support my personal goals)

- They don’t know that they don’t know what they don’t know

- May believe their last fix in their last position will work here without considering the “new” context

- May not realize that the results they seek won’t likely occur immediately, though behaviors may change (to appease)

- Ignore Deming’s “constancy of purpose” (see Deeper Reading)

Deeper Reading: [www.strategicinventorymanagement.com/1/post/2010/05/demings-point-1-create-constancy-of-purpose.html](http://www.strategicinventorymanagement.com/1/post/2010/05/demings-point-1-create-constancy-of-purpose.html)
# 2 — *Nurture a Culture of Indifference*

- Spend inordinate amounts of time on teaming, trust, and offsite meetings while avoiding the challenges of the organization
- Develop a management team that accepts unevidenced subjective reports as authoritative
- Run with the “upper right” quadrant of solutions from well-known consulting companies without matching “profiles” (or, are we really like them?)
# 3 – Focus on Budget and Schedule

- Don’t resource, manage risk, or assign responsibility (3Rs) for measurement and improvement (like a real project)
- Ignore the business case
- Organizations tend to “manage what they can” vs. manage “that which provides insight”; as a result they ignore
  - Size
  - Quality
  - Risks
  - Consistent measurement
  - Lessons learned observed
  - Standard measurement definitions
- “Reach” for something (anything) different after reading Chaos reports
- Minimize the use of “actual” data during project execution; sustain limited estimating capability (Scrum teams)
# 4 – *Punish People for Poor Measurement Results*

- Repudiate the team that finds the most defects (or reward the team with the fewest!)
- Punish the team with the highest cost per defect metric (see Jones’ work on diminishing returns)
- “Disincent” teams that spend too many hours in peer reviews (vs. known 2, 3, or 4:1 returns)
- Chastise teams for spending too much time in customer or phase-end or gate-exit reviews

Deeper Reading: *The Economics of Software Quality*; Capers Jones; 2012
*Drive*; Daniel Pink
# 5 – Take Inappropriate Corrective Action Around Special and Common Cause Variation

- Special / assignable cause variation reflects how well the process is performed
- Common cause variation reflects how well the process performs
- Use qualitative data while dismissing quantitative data
- Prematurely take corrective action on non-existing trends

Deeper Reading: Understanding Variation – The Key to Managing Chaos; Donald Wheeler; 1993
# 6 – *Refuse to “Own It”*

- **Outsource** the implementation and management of the measurement program
- Hire a consultant to do it *to you, or for you, but not with you*
- Delegate the ownership to an unempowered committee
- **Insourse** the measurement program to a *quality group* that is not in a position to influence outcomes (historically, a minority percentage of organizations have a quality group\(^1\))
- Don’t talk the talk or walk the walk
  - Avoid measurement and process improvement discussions during organization-wide meetings
  - Improvise in small groups and send mixed messages regarding commitment
  - DO talk about non-standard processes when the opportunity presents itself
  - Recognize those using non-standard processes; treat them like “heroes”

Deeper Reading: \(^1\)CIO, By the Numbers, December 1, 2003, pg 28
# 7 – Decorate the Walls with Progress and Operational Metric Charts

- Give stakeholders the impression that measures are meaningful
- Don’t use those measures for decision-making
- Allocate time to keeping the wall current
- Surround the measures with pictures of leadership receiving rewards
- Keep data collection current but stagnate its use
# 8 – Use Inconsistent Measurement Definitions Across Teams

• Allow teams to define only their own measures (what’s important to me / them)
• Collect measures that are inconsistent across the organization (story points)
• Allow teams to retain their own measures and report them as needed to a measurement group (filtering and inflationary effects)
• Alter “scorecards” to increase “green” dots, minimize “yellow” dots, and eliminate “red” dots

Deeper Reading: CMMI-DEV® - Process area: Measurement & Analysis
5 C’s of Sizing Measures

- **Complete**
  - Captures all of the product delivered to the customer
  - Doesn’t capture “hows” but rather the whats

- **Correct**
  - Captures the measure
  - Doesn’t allow for manipulation of base measures

- **Consistent**
  - Captures clearly defined measures similarly for all
  - Doesn’t facilitate “local” massaging before entry

- **Current**
  - (Repository) differentiates between recent and ancient values
  - Doesn’t incorporate irrelevant measures for predictive models

- **Connected**
  - Measures are linked to organizational objectives; project measures to the organization’s measures
  - Doesn’t allow measurement providers to create (and interpret) their own measures in place of organizational measures

Deeper Reading: *Size - The Forgotten Measure*; SEPG North America; Albuquerque, N. M.; March 15, 2012
# Use Case Points, Story Points, Function Points; What’s the Point?

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<thead>
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<th>Characteristic</th>
<th>Function Points</th>
<th>Use Case Points</th>
<th>Story Points</th>
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</thead>
<tbody>
<tr>
<td>Useful at the project level for estimating or planning</td>
<td>With historical FP data</td>
<td>With historical UCP data</td>
<td>With historical SP data</td>
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<td>ISO / Standards based</td>
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<td>Captures customer view</td>
<td>Expected</td>
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<td>Useful for benchmarking outside the company</td>
<td>Could be</td>
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<td>Easy to calculate</td>
<td>Less so</td>
<td>More so</td>
<td>Yes</td>
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<td>Easy to validate for repeatability / consistency</td>
<td>More so</td>
<td>More so</td>
<td>Less so</td>
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<td>Objectivity</td>
<td>More so</td>
<td>More so</td>
<td>Less so (team / team member variability)</td>
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<td>Technologically independent</td>
<td>Yes</td>
<td>Yes</td>
<td>Maybe</td>
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<td>Functional measurement to customer</td>
<td>Yes</td>
<td>Yes</td>
<td>Not exclusively (may include refactoring, design, and other work)</td>
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Deeper Reading: article by the same name as the slide awaiting publication by CrossTalk; March 2012
# 9 – Vacillate Measurement Interest

• “Swing” from measuring nothing, to measuring everything

• “not everything can be measured, not everything that can be measured should be” – Einstein

• Pages is a good example (next slide)

Deeper Reading: Size - The Forgotten Measure; SEPG North America; Albuquerque, N. M.; March 15, 2012
# Page Size Variations

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<th>% Content Loss</th>
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- Read “% Content Loss” (last column) as variation!
- Cumulative difference of one page to almost six
- Consider still larger font, font size, spacing, charts, diagrams, pictures, etc.
- **Impact on PMC SP1.1** – Monitor actual values of project planning parameters against the project plan.

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# 10 – Focus on Tools & Technology

- A fool with a tool is still a fool (btw, a tool is not required to play the fool!)
- Delay measurement collection until you have the right tool, interface, database, “benchmark data”
- Develop tool expertise rather than measurement expertise
- Make promises based on the “next release”
- Make more promises on getting “the tool right ” the next time
- Shift blame for lack of progress to the tool implementation schedule and setbacks

Deeper Reading: www.flickr.com/photos/tcagley/243237097/
# 10 – Ignore the Psychology of Estimating & Decision-Making

• Set aside published research that examines biases
  – Over-commitment due to own ego or credibility
  – Confirmation bias – focus on information that confirms your beliefs
  – Self-serving illusions – tendency to cloud own judgment for personal stake
  – Optimistic over confidence – underestimating the difficulties associated with your preferred course of action

• Software and measurement professionals have demonstrated that estimation results—which weren’t very close originally—often grow worse when subjected to competition and pressure to succeed.

Deeper Reading: *The First 90 Days*; Michael Watkins; 2003
See also: Ricardo Valerdi’s extensive research and publications on this topic

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Closing Thoughts

• Were you keeping score?
• How many of these sound familiar? Too familiar?
• Did you re-order these as we went through them; that is, what’s your #1, 2, and 3 takeaway?
• How might you approach some of these ailments upon your return?
• Which of your favorites are missing?
Key concepts to be presented

Successful measurement programs have essential elements for organizations. Measurement programs can be sabotaged using a number of techniques. Which of these are present in your organization today?

Learning Objectives (What participants will learn)

• Establishing a culture for measurement
• Developing a measurement program that provides value to the business
• Managing the momentum for sustained measurement progress

TOPIC
(Please limit to under 500 words)

A very small percentage of software measurement programs survive budget cuts, restructures, or the life of their sponsors. Yet a wide consensus of management teams favor the monitoring and tracking of projects and progress. What’s up with that? This session is intended to be revealing, interactive, and therapeutic.
# Keeping Score (yours!)

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Additional Readings

• *Underestimation in the “When It Gets Worse Before it Gets Better” Phenomenon in Process Improvement*; Valerdi

• *Measurements, Biases, Judgments: Understanding Variations for Reliable Estimates*; Keynote Address - Sao Paulo, Brazil; Brazilian Software Measurement & Analysis Conference; November 11, 2011; Joe Schofield

• *Size - The Forgotten Measure*; SEPG North America; Albuquerque, N. M.; March 15, 2012

• 80 other “related” presentations and publications @ joejr.com