

# **Do's and Don'ts of Process Improvement**

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# Acknowledgments

Terms like these are often used in the following material:

CMMI<sup>®</sup> Framework

IDEAL<sup>SM</sup> Model

Capability Maturity Model Integration<sup>SM</sup> and IDEAL<sup>SM</sup> are service marks of Carnegie Mellon University

<sup>®</sup>CMMI is registered in the U.S. Patent & Trademark Office

# **“Primary” Lessons Learned**

- **Secure Senior Management Sponsorship**
- **Treat SPI like a Project**
- **Engage Internal Staff.**

# OK, what now?

- Yeah, but what do we **DO**?
- And is there anything we should **AVOID** doing?

# Caveat

- **Weinberg's Organizational Dichotomy**
  - No two organizations are entirely the same
  - No two organizations are completely different
- **Weinberg's Law of Raspberry Jam**
  - The broader you spread it, the thinner it gets
  - This tutorial covers 30 specific **Do's** and **Don'ts**
  - Hope for about a 20% “raspberry jam” rate
  - The rest are intended for “a friend of yours.”

## **Do's and Don'ts**

- **Senior Management**
- **CMMI**
- **Process**
- **Measurement**
- **Behavioral Change**
- **Reviews**
- **Message from our Sponsor.**

# Do's and Don'ts: Senior Management

“Sponsorship” is nice,  
*Proactive Leadership* is better!

- **Don't** Treat the Level as the Goal
- **Do** Establish “Alignment Principle”
- **Do** Take Time Getting Faster
- **Do** Align the Reward System
- **Do** Ask Different Questions
- **Do/Don't** Lead by Example

# **Don't Treat the Level as the Goal - 1**

- **What are you really trying to achieve?**
  - **What is the business imperative?**
  - **How do your customers evaluate your products?**
  - **Why do potential customers keep buying your competitor's products?**
- **Which would be better:**
  - **Achieve Level 2, but NOT the business objectives**
  - **Achieve the business objectives, but NOT Level 2?**
- **So what's the REAL goal?**

## **Don't Treat the Level as the Goal - 2**

- **Maximize the VALUE, not the LEVEL!**
  - **Problem:** Focusing on the level establishes conflict between the SPI project and the engineering project
  - **Solution:** Focusing on the business imperative produces harmony
    - Well, at least it reduces the conflict!
    - Lends credibility to the SPI program
    - Changes discussion from “if” to “how.”

## **Do Establish “Alignment Principle” - 1**

- **First Rule of Project Management:**
  - **Faster, Better, Cheaper – pick two**
  - **The third will be the independent variable**
- **First rule of process improvement:**

**Faster, Better, Cheaper - pick ONE!**

- **If you could improve in only 1 area, which would it be?**
  - **Which “number one priority” is really on top?**
  - **Remember Deming’s “constancy of purpose”?**

## **Do Establish “Alignment Principle” - 2**

- **Medtronic Example:**
  - “Achieve an annual, sustainable 10% reduction in field reported defects without degrading current levels of cost, schedule, and functional variance”
- **Align business, project, and SPI goals**
  - SPI becomes “Software/System Project Improvement”
- **Communicate this broadly**
- **Focus with a passion!**

## **Do Take Time Getting Faster - 1**

- **Recognize the tune of the ritualistic dance**
- **Why would your customer believe 6 months when they don't believe 8?**
  - **Do YOU believe it?**
  - **Have you seen the plan?**
  - **Is it credible?**
  - **Remember: A wish is NOT a plan!**
- **How will the troops respond to this goal?**

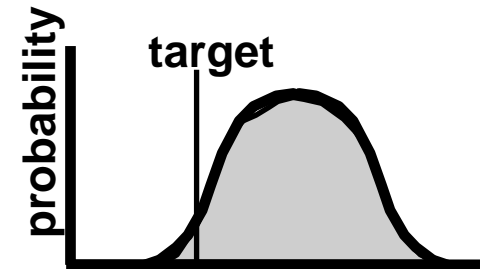
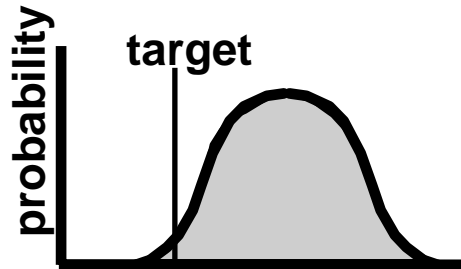
## **Do Take Time Getting Faster - 2**

- **Despite what they SAY, most customers WANT predictability - they want to believe**
  - **Applies equally well to:**
    - **Internal customers (Product Mgt / Marketing)**
    - **External customers**
- **Prerequisite to getting faster:**
  - Enhance the credibility of your current estimates!**
    - **The troops want to be believed**
    - **It's a matter of professional integrity**

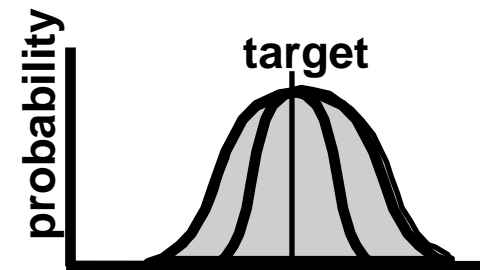
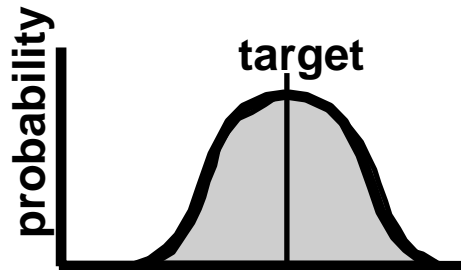
**Change the tune of the ritualistic dance**

# Improving Capability

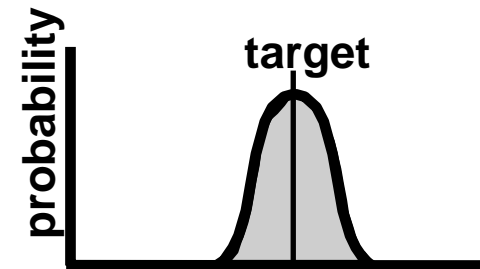
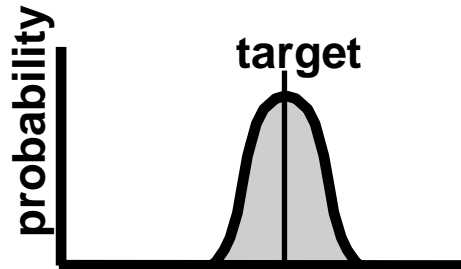
Improve predictability



Improve control



Improve performance



# **Do** Align the Reward System - 1

- **What behavior do you reward today?**
  - **Who received the last few achievement awards?**
  - **Why did they receive them?**
  - **Why do people *perceive* they received them?**
    - **Perception is reality to the perceiver**
  - **Are the reward system and the Alignment Principle aligned?**

## **Do** Align the Reward System - 2

- **The behavior you reward is the behavior you get**
  - Stop rewarding process arson and fire fighting
  - Start rewarding disciplined planning & execution
- **Not all rewards are monetary**
  - Atta-boys
  - Success stories published
  - Executive recognition
  - Promotions
- **But money's nice too!**



## **Do Ask Different Questions - 1**

- **What do you ask about in project reviews today?**
  - Is the project on schedule?
  - Is the project on budget?
  - Whose fault is it?
  - Why don't I see anybody in here on Saturday?
- **Do you ask any questions related to process or process improvement?**

## **Do Ask Different Questions - 2**

- **The power of the executive question:**
  - **Management can:**
    - **Influence behavior by asking different questions**
    - **Change behavior by insisting on getting the answers!**
- **Try asking:**
  - **Is SPI helping us achieve our alignment principle?**
  - **What improvements are you piloting?**
  - **What SPI suggestions have you made recently?**
  - **What's painful about the current way of doing things?**

## **Do/Don't Lead By Example - 1**

- **What are YOU as senior management doing to become more process disciplined?**
  - **Are any of your processes documented?**
  - **Does anyone verify that you are following them?**
  - **Are you trying to improve them over time?**
- **Are you sending the message, “Do as I say, not as I do”?**

## Do/Don't Lead By Example - 2

- **Consider documenting the Organizational Commitment Process first**
  - “How does your organization commit to doing work on behalf of a customer?”
  - **Involve peers in Marketing/Product Management**
  - **Pilot the process**
  - **Have PPQA verify adherence**
- **Demonstrate your personal commitment to process discipline and process improvement**

**Sponsorship is nice;  
*proactive leadership is better!***

# Exercise

- **Do's and Don'ts: Senior Management**
  - **Don't** Treat the Level as the Goal
  - **Do** Establish “Alignment Principle”
  - **Do** Take Time Getting Faster
  - **Do** Align the Reward System
  - **Do** Ask Different Questions
  - **Do/Don't** Lead by Example
- **What now?**
  - Which would help your organization the most?
  - What are you going to do when you get back?
  - Are there other Senior Mgt **Do's** and **Don'ts**?

## Do's and Don'ts

- Senior Management
- CMMI
- Process
- Measurement
- Behavioral Change
- Reviews
- Message from our Sponsor

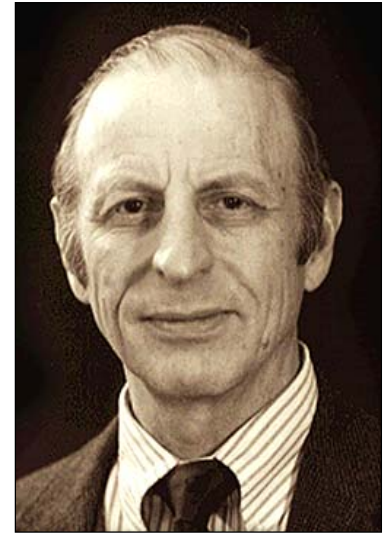
## Do's and Don'ts: CMMI

**“All models are wrong;  
some models are useful”**

- **Don't** Treat the CMMI as the Bible
- **Don't** Train the Masses on CMMI
- **Do** Become a Stronger Level 1
- **Don't** Skip Over Maturity Level 2
- **Don't** Use Appraisals for Diagnosis
- **Don't** Use the Continuous Representation  
**Don't** Use the Staged Representation

# **Don't Treat the CMMI as the Bible - 1**

- **Does Watts really look that much like Moses?**
  - **The CMMI is a good book but it's not THE good book!**
  - **1000+ suggested changes submitted**
- **It's just a model!**
  - **Goals - sound engineering/management principles**
  - **Practices - one way to accomplish the goals**
  - **Subpractices - insight into the practices.**



## **Don't** Treat the CMMI as the Bible - 2

- **Don't** have one policy per process area!
  - Apply the CMMI with your brain in “**ON**” position
  - Consider policies for:
    - Project Management Stuff
    - Engineering Stuff
    - Process Stuff
  - Write the policy **LAST**
- **Look elsewhere for additional guidance**
  - **IEEE standards, ITIL, ISO, Baldrige**
  - **Books, periodicals, employees, Dilbert, etc.**

# **Don't Train the Masses on CMMI - 1**

- **Have you heard the expressions:**
  - Here we go again?
  - The next silver bullet?
  - Yet another flavor of the month?
  - This too shall pass?
- **Have you ever read the CMMI stuff like a novice?**
  - “Technical data package”?
  - “Organizational Process Focus”??
  - “Instantiation”???
  - “Constellation”????

## **Don't Train the Masses on CMMI - 2**

- **What should you do?**
  - **Train the SEPG on the CMMI**
  - **Train Process Action Teams on relevant portions**
  - **Train the unwashed masses on their processes**
    - **And DON'T call it “the CMMI process!”**
  - **Consider providing CMMI orientation after:**
    - **Initial value has been proven and momentum established**
    - **People start asking how you got so smart**
- **Translate CMMese into local jargon**
  - **In order to influence behavior, people have to understand it!**

## **Do** Become a Stronger Level 1 - 1

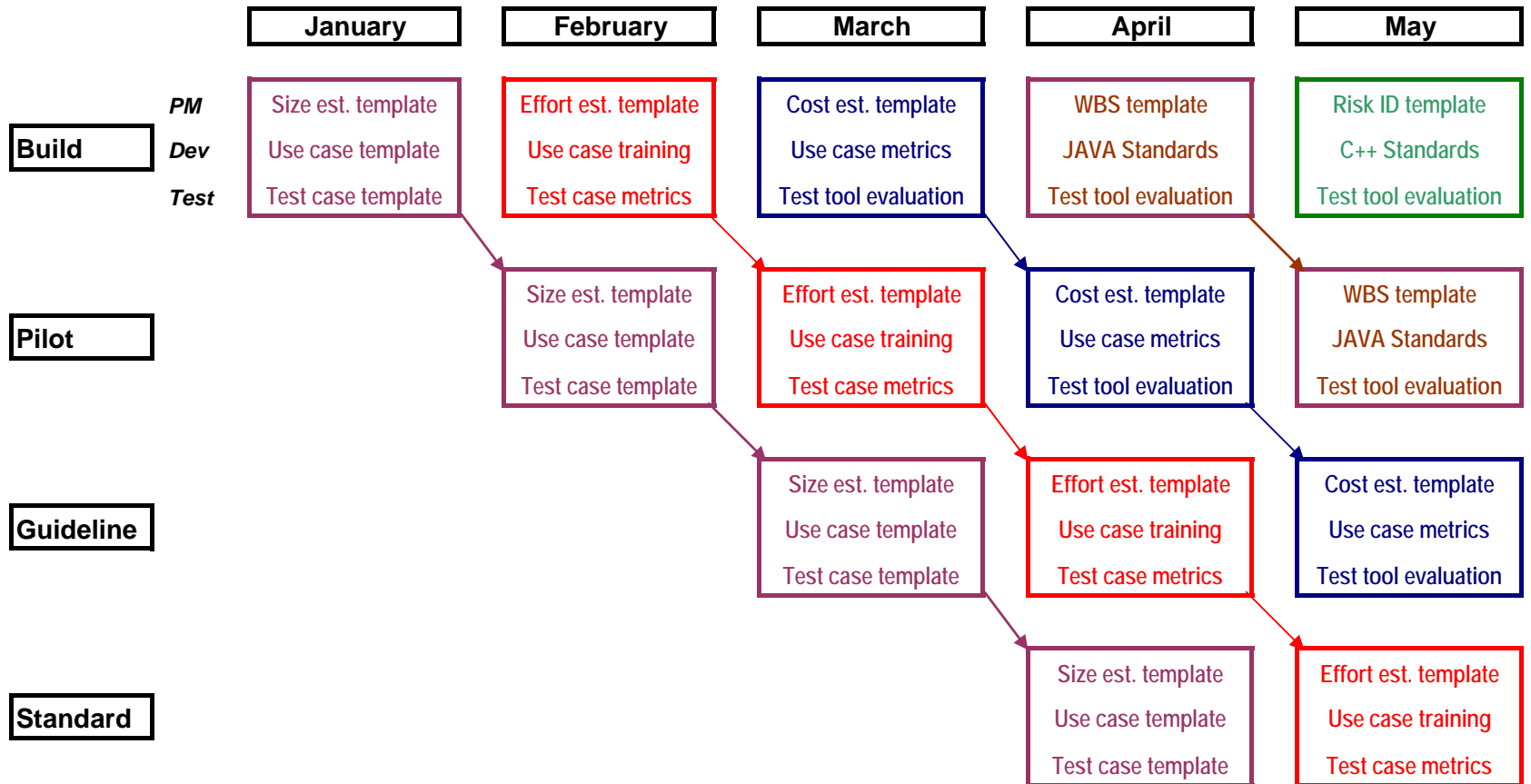
- **How many Process Action Team do you have?**
  - **Do you have one PAT for each of the Level 2 PAs?**
    - **Is your “process pain” equally distributed?**
    - **Can projects absorb all of these concurrent changes?**
- **Are you treating the projects as *your customers*?**
  - **Are they actively involved in establishing SPI requirements and priorities?**

## **Do** Become a Stronger Level 1 - 2

- **Treat every level, even level 1, as a continuum**
  - **Improve in a few areas to gain experience, credibility, momentum, and process discipline**
  - **Provide one or two improvements per target audience**
  - **It's OK to improve in non-CMMI areas**
- **Pilot changes to get it “righter”**
  - **Not every change is an improvement**
  - **Not every improvement will be initially embraced**
    - **If you build it, they might not come!**

**It's the education, not the degree,  
that makes you smarter.**

# Do Become a Stronger Level 1 - 3



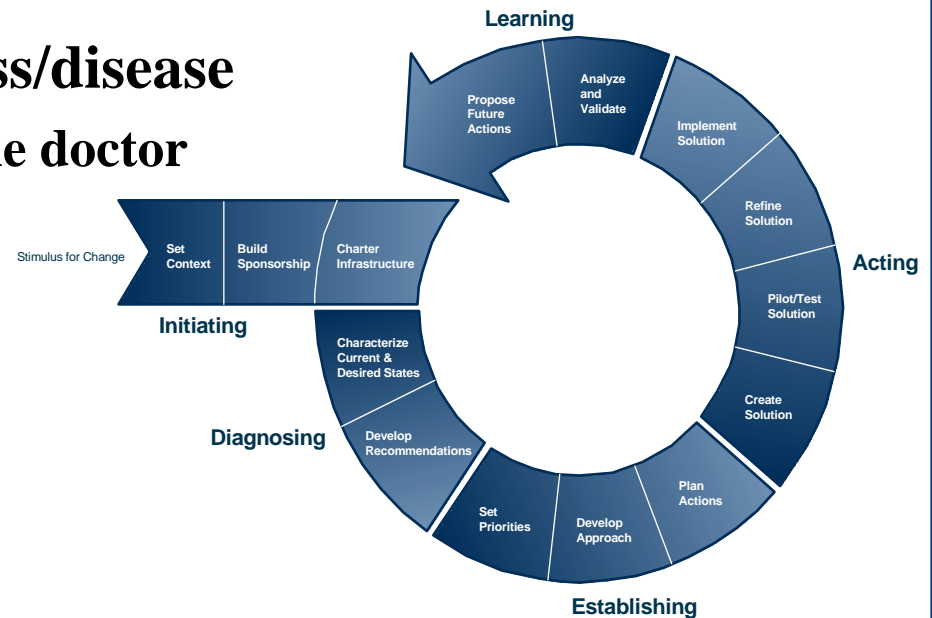
## **Don't Skip Over Maturity Level 2**

- **Level 2 approach:**
  - Document the “as is” practices
  - Use the CMMI to *supplement* existing good practices
  - Provides a basis for sharing good practices
- **There is no "CMMI Level 2 In-a-Box"**
  - It's not the process documentation, **Stupid!**
  - The process documentation is **NOT** the process

**Believe it or not,  
it's a BEHAVIORAL model!**

# Don't Use Appraisals for Diagnosis - 1

- **Diagnosis implies sickness/disease**
  - Nobody enjoys going to the doctor



- **An appraisal should be more like a health check**
  - Many people do enjoy going to the health club
  - Let's treat the patient like they are already healthy
    - Assume that the patient wants to get even healthier
    - "Seeking opportunities to make the organization even better than it already is."

## **Don't Use Appraisals for Diagnosis - 2**

- **It's not about levels, it's about capability**
  - **Don't** confuse tactics with strategy
    - **Alignment Principle** speaks to strategy
    - **Process improvement is nothing more than one tactical approach to achieve strategic business objectives**
  - **“When the map & terrain disagree, believe the terrain”**
    - **Appraisal view**
      - The process documentation is the map
      - The process as performed is the terrain
    - **Outsourcing view**
      - Their maturity level is the map
      - Their results are the terrain.

**Don't** Use the Staged Representation

**Don't** Use the Continuous Representation

- **Staged representation**
  - Prescribed ordering with proven results
  - Organizational change model
- **Continuous Representation**
  - Feel the pain/fix the pain
  - More granular level of information
  - Encouragement to consider quantitative management in any/all process areas
- **Don't** use *either* – **Do** use *both*.

# Maturity Level 2 Example

	Staged at Maturity Level	1/1/06 Mini Appraisal	1Q06 Plan	2Q06 Plan Act	3Q06 Plan	4Q06 Plan Act
<b>Project Mgt:</b>						
PP	2	2	2	2	2	2
PMC	2	1	1	2	2	2
SAM	2	0	1	1	2	2
<b>Engineering:</b>						
REQM	2	1	2	2	2	2
<b>Support:</b>						
CM	2	2	2	2	2	2
PPQA	2	2	2	2	2	2
MA	2	0	0	1	1	2

# Maturity Level 3 Example

	Staged at Maturity Level	1/1/06 Mini Appraisal	1Q06 Plan	2Q06 Plan Act	3Q06 Plan	4Q06 Plan Act	1Q07 Plan	2Q07 Plan Act	3Q07 Plan	4Q07 Plan Act	
<b>Process Mgt</b>											
OPF	3	1	1	2	2	2	2	3	3	3	
OPD	3	0	1	1	1	2	2	2	3	3	
OT	3	1	1	1	1	2	2	2	3	3	
<b>Project Mgt</b>											
PP	2	2	2	2	3	3	3	3	3	3	
PMC	2	1	1	2	2	2	3	3	3	3	
SAM	2	0	1	1	2	2	2	3	3	3	
IPM	3	0	0	0	0	1	1	1	2	3	
RSKM	3	1	1	1	1	1	1	2	2	3	
ISM	3	0	0	0	0	1	1	2	2	3	
<b>Engineering</b>											
REQM	2	1	2	2	2	2	3	3	3	3	
RD	3	1	2	2	2	2	2	3	3	3	
TS	3	1	1	1	1	1	1	2	2	3	
PI	3	1	1	1	1	1	2	2	2	3	
VER	3	1	1	1	1	1	2	2	3	3	
VAL	3	0	0	1	1	1	2	2	3	3	
<b>Support:</b>											
CM	2	2	2	2	2	2	3	3	3	3	
PPQA	2	2	2	2	3	3	3	3	3	3	
MA	2	0	0	1	2	2	2	2	3	3	
DAR	3	0	0	0	1	1	1	2	2	3	

## Do's and Don'ts

- Senior Management
- CMMI
- **Process**
- **Measurement**
- **Behavioral Change**
- **Reviews**
- **Message from our Sponsor**

## **Do's and Don'ts: Process**

**It's NOT the process documentation, Stupid!**

- **Don't Over-Engineer Processes**
- **Don't Target Mega-Projects First**
- **Do Think “Good” Not “Best” Practice**

# **Don't Over-Engineer Processes - 1**

- **The "accordion effect" may be unavoidable**
  - **Start with very little process documentation in place**
  - **Develop 4 big honkin' binders**
  - **It becomes shelfware**
  - **Devolve RDC versions**
    - **“Decomplexification.”**
  - **TRY to do it right the first time**
    - **Preflight checklist**
    - **Think “Thin to win!”**
    - **Experienced practitioner’s cheat sheet**
    - **PPQA/PPQA’s review checklist.**

## **Don't Over-Engineer Processes - 2**

### **Process documentation vs. Procedures/work instructions vs. Training material**

- **Don't give Process Action Teams too much time**
  - Parkinson's Law is sure to creep in
  - Have "good case examples" for guidance
- **Use 4 roles to develop process documentation:**
  - Facilitator (SEPG)
  - Content providers (process executors)
  - Scribe (technical writer)
  - Reviewers (other process executors).

## **Don't Target Mega-Projects First**

- **Many groups build the “standard process” to address their largest projects**
  - Theory is: easier to eliminate than to add
  - **Problem:** Projects have to “justify” scaling down
- **Build a thin process layer for medium projects**
  - Justify changes as the first 2” binder fills up
  - Provide ability to tailor up/down to accommodate need for more/less complexity, coordination, control

**The process should serve the projects  
not vice versa!**

## **Do** Think “Good” not “Best” Practice

- **Avoid religious warfare for a 2% improvement**
  - At least until maturity level 4 and 5
  - “Just because I’m different doesn’t mean I’m wrong”
  - Consistency is good, but weigh the cost/benefit
  - Consider “content standards” vs. standard templates
    - Especially for the journey to maturity level 2
- **Don’t exercise stupidity in the name of consistency!**

# Exercise

- **Do's and Don'ts: CMMI and Measurement**
  - **Don't** Treat the CMMI as the Bible
  - **Don't** Train the Masses on CMMI
  - **Do** Become a Stronger Level 1
  - **Don't** Skip Over Maturity Level 2
  - **Don't** Use Appraisals for Diagnosis
  - **Don't** Use the Staged Representation
  - **Don't** Use the Continuous Representation
  - **Don't** Over-Engineer Processes
  - **Don't** Target Mega-Projects First
  - **Do** Think “Good” Not “Best” Practice

# Exercise

- **What now?**
  - Which would help your organization the most?
  - What are you going to do when you get back?
  - Are there other CMMI or Measurement **Do's** and **Don'ts**?

# Do's and Don'ts

- Senior Management
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## Do's and Don'ts: Measurement

“In God we trust,  
all others bring data”

- **Do** Employ Basic Measures NOW!
- **Don't** Collect Data You Don't Use
- **Do** Enhance Data Integrity
- **Do** Capture Healthy Measures



Picture by Bill Riddle  
(Used with permission)

# **Do Employ Basic Measures NOW! - 1**

- **You don't have a current baseline?**
  - **Start now or you'll be saying the same thing in 2 years**
  - **Do you remember saying it 2 years ago?!**
- **What to measure?**
  - **Look to**
    - **The Alignment Principle**
    - **The goals of the process improvement program**
  - **Defects, effort, schedule.**

## **Do Employ Basic Measures NOW! - 2**

- **There is no physics in software**
  - You can't say, "It can't be done"
  - You should be able to say, "We can't do it"
  - "But here's what we can do..."
- **Management's gut is bigger than yours every time!**
  - **Schwartz's Law:**

**"Gut size and estimates are inversely proportional."**

## **Don't Collect Data You Don't Use**

- **Do you have “write-only” databases?**
  - **Do you use your:**
    - **Historical data to improve your estimates?**
    - **PPQA, inspection and risk data to detect trends?**
- **Use it or lose it!**
  - **Data collection is an expensive investment**
  - **There is no ROI if the data is not used**
- **Don't conduct appraisals if nothing is to change**
  - **Same for Employee Satisfaction Surveys, etc.**
- **Better yet - USE THE DATA!**

## **Do Enhance Data Integrity**

- **Track actuals at the same level you estimate**
  - Don't throw darts in the dark
  - Track actuals to motivate corrective action
- **Providers of data must be consumers of the data**
  - WIIFM?
- **Adopt Grady's Rules of Data Etiquette**
  - Private vs. public data
  - Don't misuse the data.

# **Do Capture Healthy Measures - 1**

- **87% of Americans who establish New Year's resolutions have one related to health**
  - **(And 72% of statistics are made up on the spot!)**
  - **There is no universally-accepted “health index”**
  - **But there are indicators of health**
    - **Blood pressure**
    - **Weight**
    - **Body Mass Index**
    - **Time to run a mile/5K/10K/marathon**
    - **Beers per fortnight**
    - **Number of trips to the doctor**
      - **Therapeutic**
      - **Preventative**
    - **Etc.**

## Do Capture Healthy Measures - 2

- **Ensure consistent weighings over the year**
  - Same ~~analog scale~~ digital scale
  - Same day of the week
  - Same time of day
  - Same level of clothedness
  - Before working out
  - After the purge and before the gorge
- **Bottom line on software measures:**

**Two thirds of all projects have lousy metrics;  
The other half just doesn't care!**

## Do's and Don'ts

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# **Do's and Don'ts: Behavioral Change**

**If it isn't helping the projects succeed,  
the SEPG is failing!**

- **Do Eliminate Low-Value-Added Tasks**
- **Do Pilot Early and Often**
- **Do Make Friday SPI-day**
- **Do Become a Learning Organization**
- **Don't Ignore the Adoption Curve**

## **Do Eliminate Low-Value-Add Tasks**

- **Seek and eliminate some useless administrivia**
  - **The plate is only so big!**
- **Do this early and make some friends**
- **Helps avoid the "process weenie" tag.**

# Do Pilot Early and Often

- **Don't debate issues in the ivory tower**
  - Wastes a lot of time
  - Chances are, both sides are wrong!
- **Run “alpha pilots” to test competing theories**
  - Seek feedback from the process executors
    - Value vs. overhead/disruption
    - Skills and cultural fit
    - Toolability
    - Tailoring suggestions
- **Run “beta pilots” to demonstrate readiness.**

## **Do Make Friday SPI-day**

- **If you allocate part-time SEPG/PAT members:**
  - **Less than 20% is useless**
  - **Remember the Law of Raspberry Jam**
    - **The broader you spread it the thinner it gets**
    - **Don't spread it out - allocate a full day for SPI work**
    - **Friday is a lousy day - pick Wednesday instead!**
  - **Hold SPI people accountable for:**
    - **Achieving their SPI milestones and deliverables**
    - **Renegotiating their SPI commitments**
  - **Make it part of their performance review.**

# **Do** Become a Learning Organization - 1

- **Most organizations are Learning Organizations**
  - Most are Forgetting Organizations as well
  - Do post mortems really capture “lessons learned?”
- **Evolve “lessons identified” into “lessons learned”**
  - Conduct “phase transition reviews”
    - **At the end of each phase, ask:**
      - What went right; why?
      - What went wrong; how could it have been avoided?
      - What problems escaped from previous phases?
    - **Review “lessons identified” for the upcoming phase**
      - From your last project
      - From other projects
    - **Incorporate changes and recommit to the plan.**

## **Do** Become a Learning Organization - 2

- **The flip side of every assumption is a risk**
  - **And the flip side of every risk is an opportunity!**
- **Every problem is a risk that was overlooked**
  - **How can you gain better foresight next time?**
  - **Establish triggers indicating, “Here we go again!”**
- **Learn from other projects**
  - **Each project exploits organizational knowledge**
  - **Each project contributes as well**
  - **Flag data from “less than successful” projects**
    - **“Those who study history are bound to repeat it!”**

# **Don't Ignore the Adoption Curve**

- **You will NOT convert the unwashed masses**
  - Don't waste cycles on the late majority/laggards
  - Target the innovators and early adopters
  - Prove the value and capture the early majority
- **Senior management must exercise “tough love”**
  - Apply pressure on the late majority
  - Apply sanctions on the laggards

**Ultimately, compliance becomes part of the  
“salary continuation program.”**

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## **Do's and Don'ts: Reviews**

- **Do Implement Value-Added PPQA**
- **Do Evolve PPQA's Role**
- **Do Reinvigorate Your Peer Reviews**

## **Do Implement Value-Added PPQA - 1**

- **Invest your best and brightest**
  - **Train them to serve as project coaches/mentors**
  - **Consult on the selection of process elements**
- **Initially focus on process adoption not compliance**
  - **Assist projects in adopting the process and deriving the intended value**
    - **Ask about the value of the process - and LISTEN!**
    - **Solicit feedback on administrivia/improvements**
  - **Are there resources/skills issues to be addressed?**
- **Serve as the projects' liaison to the SEPG**
  - **Help them Obiwan, you're their only hope!**

## **Do Implement Value-Added PPQA - 2**

- **The first two audits of a new process are freebies**
  - **First one is “understanding”**
  - **Second one is “alignment”**
  - **Third one is for real**
- **Differentiate non-compliances by severity**
- **Use a 4-point scale**
  - **Fully(100), largely(80), partially(40), not (0) compliant**
  - **Sets up a consulting discussion**
- **Perform trend analysis**
  - **Identify opportunities for sampling.**

# PPQA – Example Trend Charts - 1

Estimation Process 3/2006	Ave	A	B	C	D	E	F
Size estimate	80	80	80	40	80	100	100
Size-based effort estimate	77	100	100	80	0	80	100
Bottom-up effort estimate	100	100	100	100	100	100	100
Effort estimate reconciliation	67	100	80	0	40	100	80
Effort estimate assumptions	80	100	80	80	40	80	100
Cost estimates	100	100	100	100	100	100	100
Non-personnel costs	67	N/A	80	N/A	80	40	N/A
Cost estimate assumptions	100	100	100	100	100	100	100
<b>Score</b>	<b>85</b>	<b>97</b>	<b>90</b>	<b>71</b>	<b>68</b>	<b>88</b>	<b>97</b>

# PPQA – Example Trend Charts - 2

<b>Estimation Process</b>	<b>Ave</b>	<b>12/05</b>	<b>1/06</b>	<b>2/06</b>	<b>3/06</b>
Size estimate	76	N/A	71	76	80
Size-based effort estimate	71	N/A	65	72	77
Bottom-up effort estimate	98	100	95	98	100
Effort estimate reconciliation	64	N/A	60	65	67
Effort estimate assumptions	89	97	92	87	80
Cost estimates	98	94	96	100	100
Non-personnel costs	79	80	88	80	67
Cost estimate assumptions	100	100	100	100	100
<b>Average</b>		<b>94</b>	<b>83</b>	<b>85</b>	<b>84</b>

## **Do Evolve PPQA's Role**

- **Level 1 => Level 2: PPQA instills process discipline**
  - Assists with process adoption
  - Compliance based on “fear of the audit”
- **Level 2 => Level 3: PPQA detects process erosion**
  - **Sampling is fine! Selection based on:**
    - Most critical items
    - Systemic problems
    - New/modified process
    - New process executer
  - **If major non-compliances, then conduct full audit.**

# **Do Reinvalidate Your Peer Reviews**

- **Softer, gentler approach**
  - Peer review objective: phase containment of defects
  - “Defect” implies that the author is defective
  - “Saves” and “escapes”
- **Inject defects to gauge review effectiveness**
  - Initially, don’t tell ‘em
  - Once you’ve got a baseline of performance, tell ‘em
  - After improvement is noted, stop injecting defects
    - But don’t tell ‘em you’ve stopped!
    - Hawthorne effect will sustain improved performance
- **Make the review team co-responsible for the quality of the work product.**

# Exercise

- **Do's and Don'ts: Behavior and PA Specific**
  - **Do** Eliminate Low-Value-Added Tasks
  - **Do** Pilot Early and Often
  - **Do** Make Friday SPI-day
  - **Do** Become a Learning Organization
  - **Don't** Ignore the Adoption Curve
  - **Do** Implement Value-Added PPQA
  - **Do** Evolve PPQA's Role
  - **Do** Reinvigorate Your Peer Reviews
- **What now?**
  - Which would help your organization the most?
  - What are you going to do when you get back?
  - Are there other Behavior or PA **Do's** and **Don'ts**?

## Do's and Don'ts

- Senior Management
- CMMI
- Measurement
- Process
- Behavioral Change
- PA Specific
- **Message from our Sponsor**

# **Do Participate in Your Local SPIN**

- **Why participate in your SPIN?**
  - **Learn from others' experience**
  - **Get consultation on your issues**
  - **Provide consultation on their issues**
  - **Expand your network**
- **All this for one low price of admission!**

# Questions?

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## More “**Do’s** and **Don’ts**” After Break

- **Break starts in about 5 minutes**
  - We could cover another slide or two
- OR
- We could be first in line for coffee and cookies!
- **But before you go...**
  - **Do’s** and **Don’ts** articles
    - Sent via email on (or about) the first of every month
    - No salesman will ever call
    - Free – and worth every penny!
  - Give me a business card or send me an email
- **One LAST thing...**