

Do's and Don'ts of Process Improvement

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Acknowledgments

Terms like these are often used in the following material:

CMMI[®] Framework

IDEALSM Model

Capability Maturity Model IntegrationSM and IDEALSM are service marks of Carnegie Mellon University

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Frequent Themes at SPI Conferences

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

Don't Let the Dip Get You Down

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?**
- Why aren't your customers THRILLED with your products and services?**
- 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 projects
- **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:

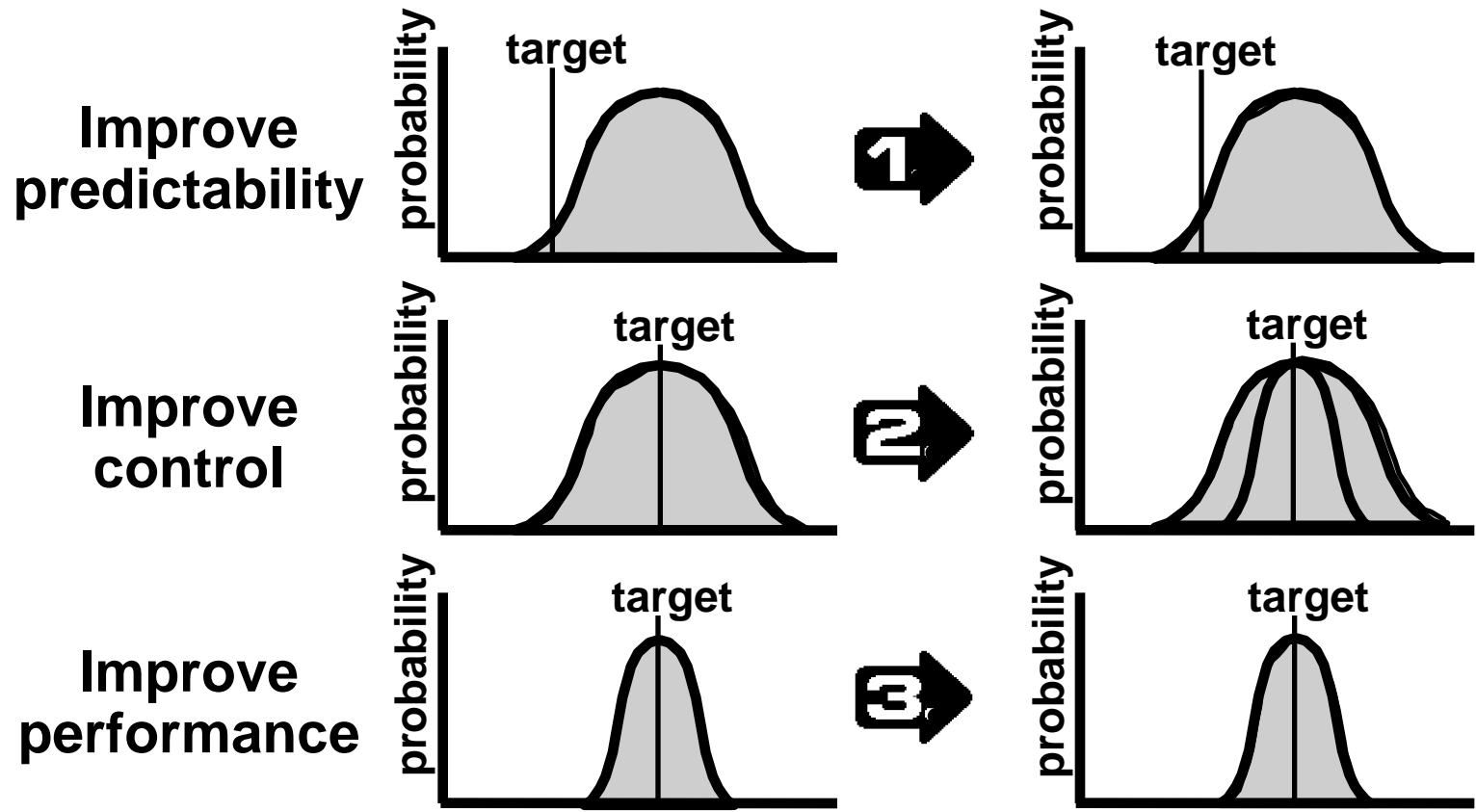
Enhance the credibility of your current estimates!

– The troops want to be believed

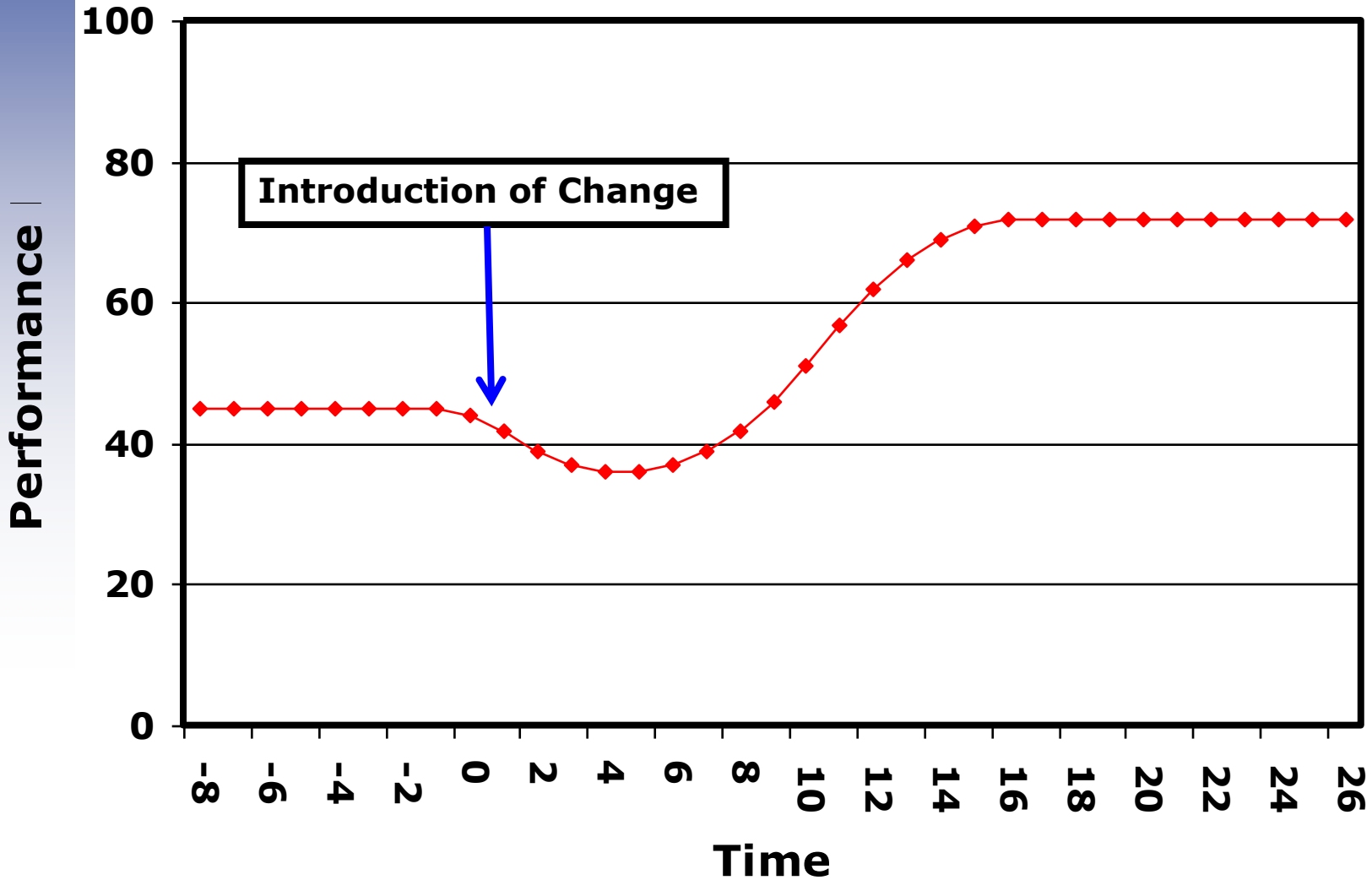
– It's a matter of professional integrity

Change the tune of the ritualistic dance

Improving Capability



Don't Let the Dip Get You Down - 1



Don't Let the Dip Get You Down - 2

Attributes that affect length/breadth of the “dip:”

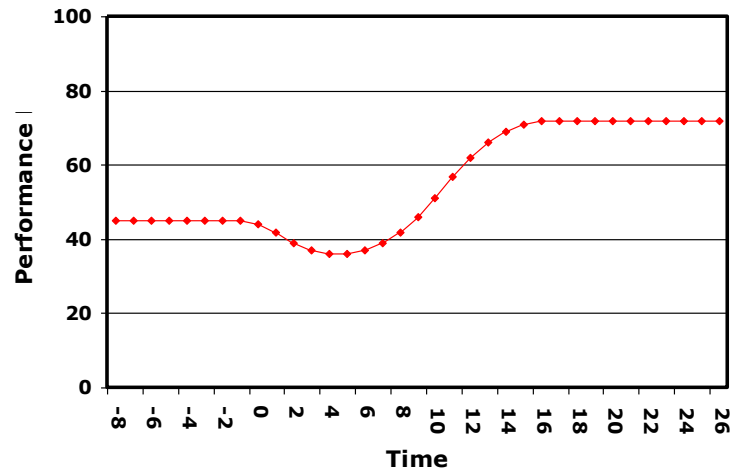
- Recognition of the need to change**
- Organizational change culture**
- Cultural fit of the changes being introduced**
- Compelling evidence of the benefit of these changes**
- Size of the target audience**
- Perception of cumulative changes**
- Change saturation point of the target audience**
- Duration since the last change in same general area**
- Visibility/believability of management support for the change.**

Don't Let the Dip Get You Down - 3

Not all resistance is irrational!

- Some changes do more harm than good
- Don't confuse “change” or “activity” with “progress”

The REAL trick is knowing the difference!



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
- **Don't** Let the Dip Get You Down
- **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

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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

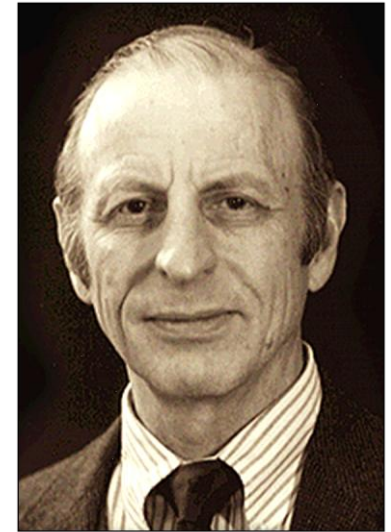
Don't Use the Continuous Representation

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**

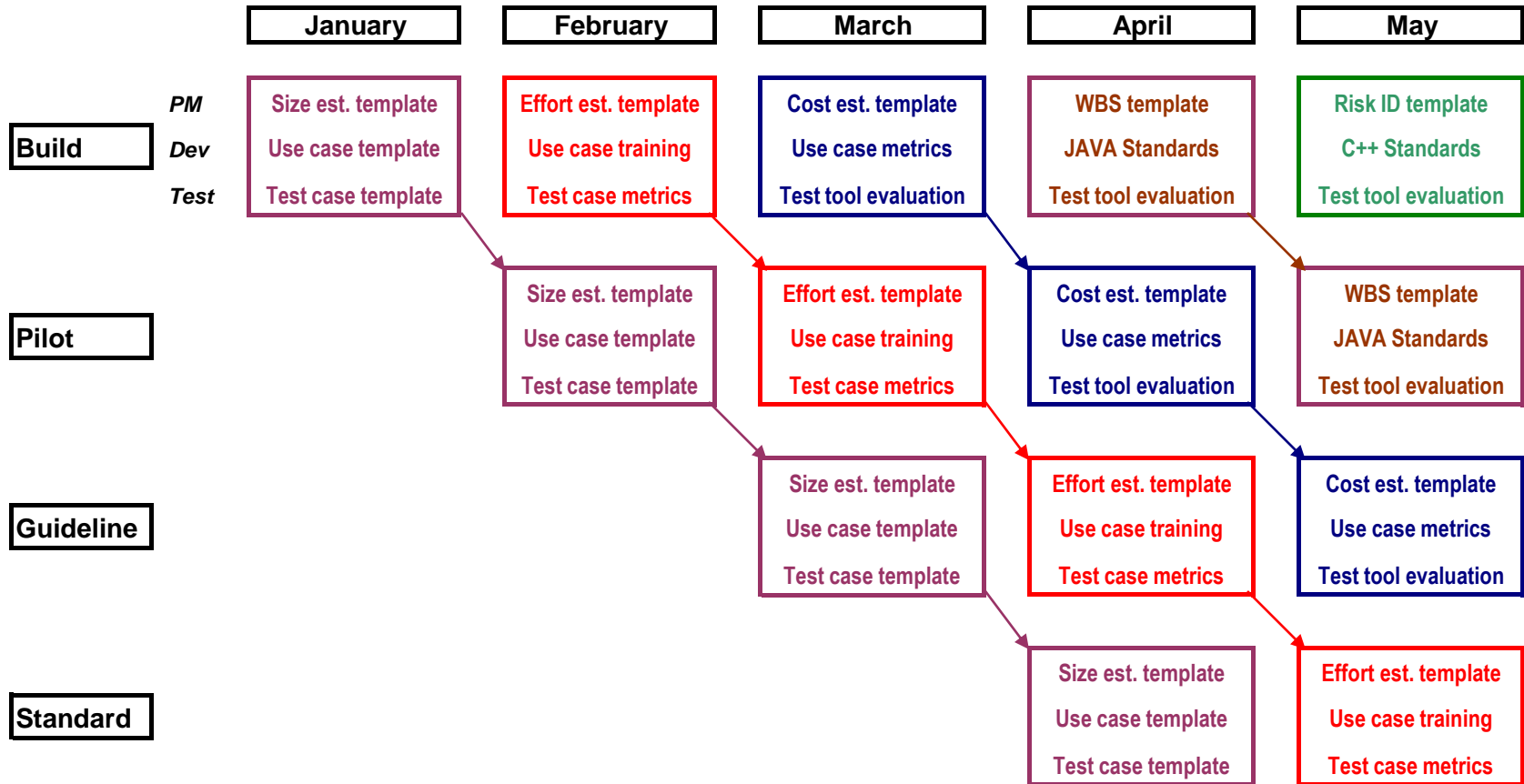
Pilot changes to get it “righter”

- **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"

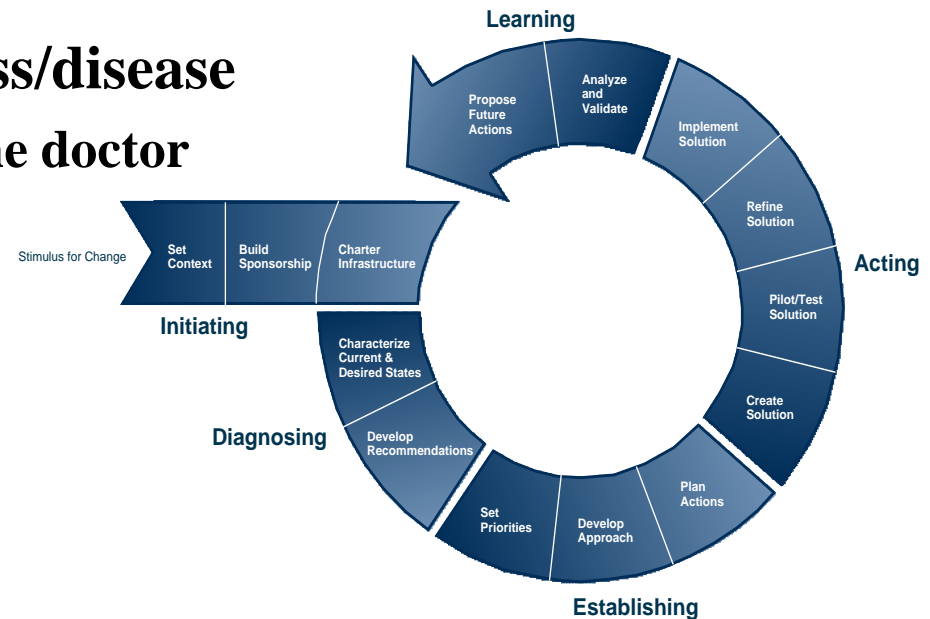
- It's not the process documentation, Stupid!
- The process documentation is **NOT** the process

**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 | 1/1/08 Mini Appraisal | 1Q08 Plan | 2Q08 Plan Act | 3Q08 Plan | 4Q08 Plan Act |
|---------------------|--------------------------|-----------------------|-----------|---------------|-----------|---------------|
| Project Mgt: | | | | | | |
| PP | 2 | 2 | 2 | 2 | 2 | 2 |
| PMC | 2 | 1 | 1 | 2 | 2 | 2 |
| SAM | 2 | 0 | 1 | 1 | 2 | 2 |
| Engineering: | | | | | | |
| REQM | 2 | 1 | 2 | 2 | 2 | 2 |
| Support: | | | | | | |
| 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 | 1/1/08 Mini Appraisal | 1Q08 Plan | 2Q08 Plan Act | 3Q08 Plan | 4Q08 Plan Act | 1Q09 Plan | 2Q09 Plan Act | 3Q09 Plan | 4Q09 Plan Act |
|--------------------|--------------------------|-----------------------|-----------|---------------|-----------|---------------|-----------|---------------|-----------|---------------|
| Process Mgt | | | | | | | | | | |
| 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 |
| Project Mgt | | | | | | | | | | |
| 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 |
| Engineering | | | | | | | | | | |
| 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 |
| Support: | | | | | | | | | | |
| 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

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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**?

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Do's and Don'ts: Measurement

“In God we trust,
all others bring data”

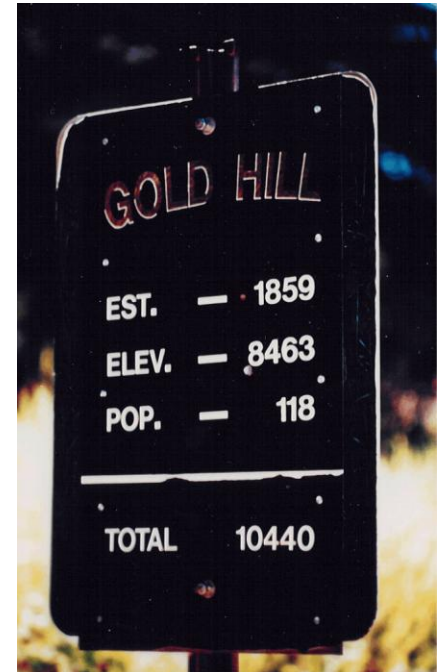
Do Employ Basic Measures NOW!

Don't Collect Data You Don't Use

Do Enhance Data Integrity

Do Capture Healthy Measures

Do Study Math for ML4 and ML5



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 don't care!**

Do Study Math for ML4 and ML5

ML4 establishes and exploits stable processes

- It's the only level that's **NOT** about improvement
- It's about understanding your capability and performing that way consistently

Process performance baselines

- Established based on historical performance data
- “If you always do what you've always done,
You will always get what you've always gotten”

Process performance models

- Think about Alan Greenspan...
- Use leading indicator data to predict the future value (or range of values) of a related variable of interest

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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 3/2008 | 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 |
| Score | 85 | 97 | 90 | 71 | 68 | 88 | 97 |

PPQA – Example Trend Charts - 2

| Estimation Process | 3/08 | 2/08 | 1/08 | 12/07 | Ave |
|--------------------------------|-----------|-----------|-----------|-----------|-----|
| Size estimate | 80 | 76 | 71 | N/A | 76 |
| Size-based effort estimate | 77 | 72 | 65 | N/A | 71 |
| Bottom-up effort estimate | 100 | 98 | 95 | 100 | 98 |
| Effort estimate reconciliation | 67 | 65 | 60 | N/A | 64 |
| Effort estimate assumptions | 80 | 87 | 92 | 97 | 89 |
| Cost estimates | 100 | 100 | 96 | 94 | 98 |
| Non-personnel costs | 67 | 80 | 88 | 80 | 79 |
| Cost estimate assumptions | 100 | 100 | 100 | 100 | 100 |
| Average | 85 | 85 | 83 | 94 | |

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 Reininvigorate 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

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One LAST thing...