

CMMI on the Cheap

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Setting the Stage

- A little about me:
 - USAF, retired
 - 15 years CPI experience
 - Variety of organizational experiences
 - Never say die
 - Think outside the container

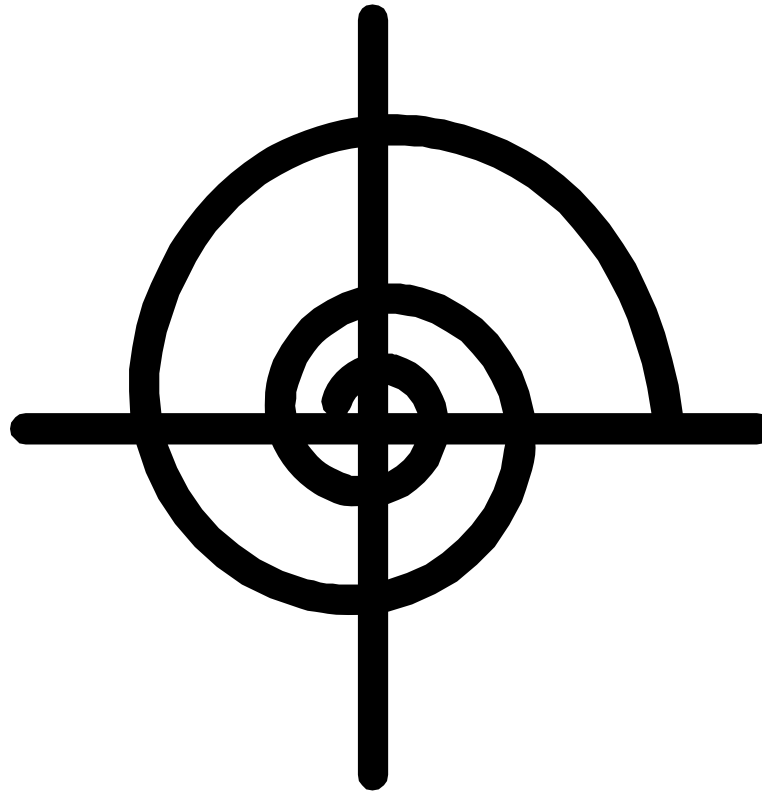


Getting Started – a Basic Plan

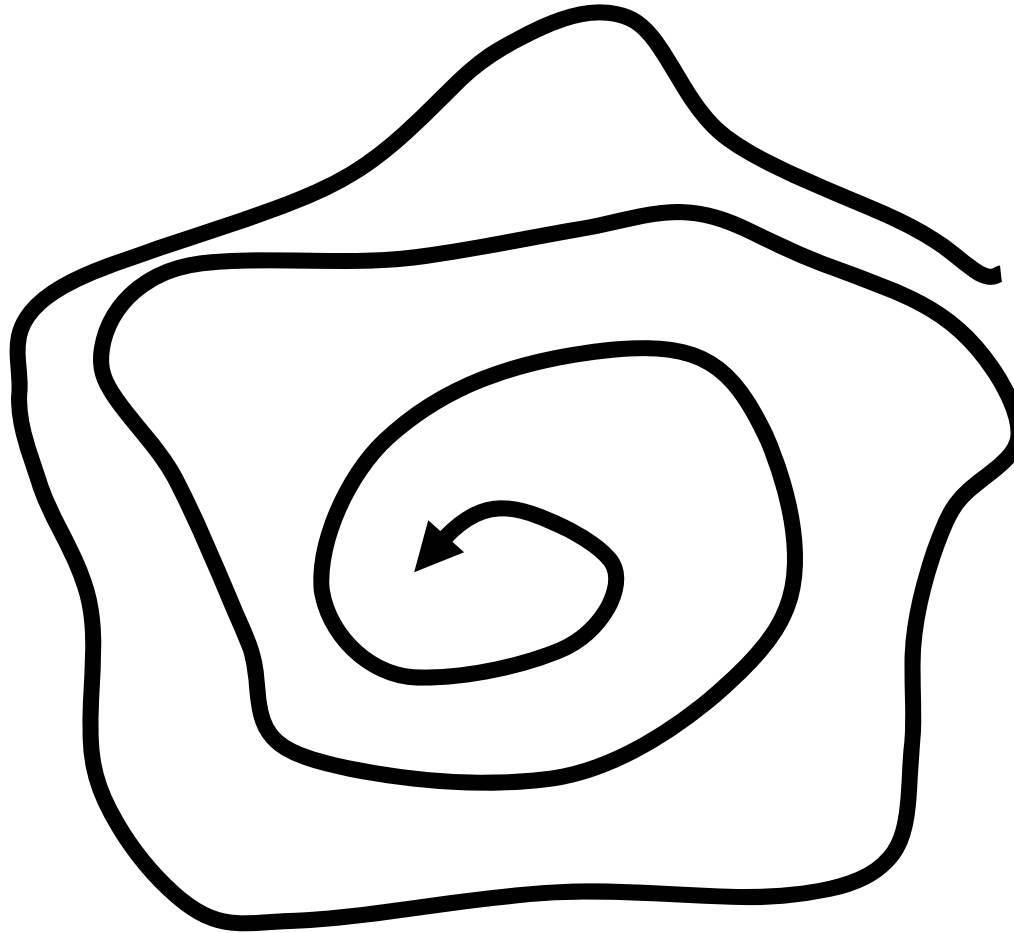
- What's your goal?
 - CPI
- Who's your management champion?
 - Your boss
- How are you going to approach this effort?
 - Document your process management lifecycle
- You have no money. How do you get started?
 - Just start. PIT team 1 hr per week.
- How do I turn the CMMI-x into SOIs and SOPs?
 - CMMI Goals and Practices become Policy (SOI)
 - Your org SMEs provide inputs for SOPs
- What should be my first process to document?
 - What's your biggest headache?
 - What consumes the most time?
 - Where's the most rework?



CPI is a continuous process but...



this continuous process





Find the Right Leader

Describe your interest in CPI

- A. CP who?
- B. I'm doing this because I was told to.
- C. I had nothing else to do today.
- D. My boss is interested in it so I am, also.
- E. I live for this stuff. I want to ensure everyone's getting the best bang for the buck.



Find the Right Leader

What's your aptitude for this?

- A. I have a PhD in Process Improvement. I KNOW how it's done. I don't need any more training.
- B. I can hardly spell CPI but I understand the basic concepts and want to help the office improve things. I love to learn. Learning is a life-long endeavor. I see pros and cons in nearly everything.
- C. CMMI is the only useful CPI tool. We should use it, stick to it, and never deviate. Since the CMMIs are frameworks, they are much more useful than Lean, 6-Sigma, or ISO 9000 combined.



Find the Right Leader

How accurate do you want your processes?

- A. What we have now is acceptable. We don't need to improve anything.
- B. All but me are clueless. I'll have to write the processes for everyone else.
- C. We can make it better. Why publish a flawed process? I'd rather take longer and get it perfect the first time.
- D. I guess something around 80% accurate is good. Every time we go through this process, we'll improve it a tad. Over time it will approach perfection.



Find the **Team Members**

Why are you on this team?

- A. I volunteered. My regular job is boring and I wanted something different.
- B. My boss made me. He said I had the most free time of anyone.
- C. I volunteered because I hate my boss and will do anything to get away from him, even for just an hour or 2.
- D. Are you kidding? I jumped at the opportunity to do this. I live for this stuff. I hate to see wasted money and effort. Let's get started.
- E. My boss appointed me because she said I was the person that seemed best to get things done right the first time. I figure I was just doing my job. Everyone should do it this way.



Find the Team Members

Which of these is your philosophy?

- A. We get the job done now. Don't fix what ain't broken.
- B. There's always room for improvement.
- C. Before we can start, we need to measure so we'll know how much we've improved.
- D. Before we begin we need a very thorough, well thought out plan, identifying everything we're going to fix and in what order, along with a cost and schedule.



Find the Team Members

How should we begin?

- A. Measure first. Then fix for improvement of the measure.
- B. Start with the process that causes the most and biggest headaches.
- C. Find the easiest process to fix first so you can get a quick success.
- D. Start with the process that is used the most, hence will yield the most improvement.
- E. It really doesn't much matter. You can pick one of the above or just start anywhere. The only bad strategy is to not start at all. Sooner or later you'll want/need to improve it all.



Find the Team Members

What's the best model to use?

- A. Lean 6-Sigma because you have to measure before you can improve. This also leads to the best solution.
- B. The one that works for you.
- C. CMM(s) or CMMI(s) because they give you a roadmap such that you can identify what processes you need.
- D. ISO because it will lead you to the greatest overall improvements.



What's the single greatest reason most CPI efforts fail?

Lack of appropriate management support.



Why does management support dwindle?

- They knew this was going to be a long-term investment because you told them.
- They understand that we **NEED** these process improvements.
- They understand that when “complete” they’ll be saving mega-bucks.

However...

- They get a “bill” each month.
- They have no or inadequate insight into any progress.
- The few visible improvements just don’t justify the expense.
- This has become a cash cow.



How do you avoid this?

Management insight on both a:

- micro scale &
- macro scale.

How can you do this?

Come back next year to find out.



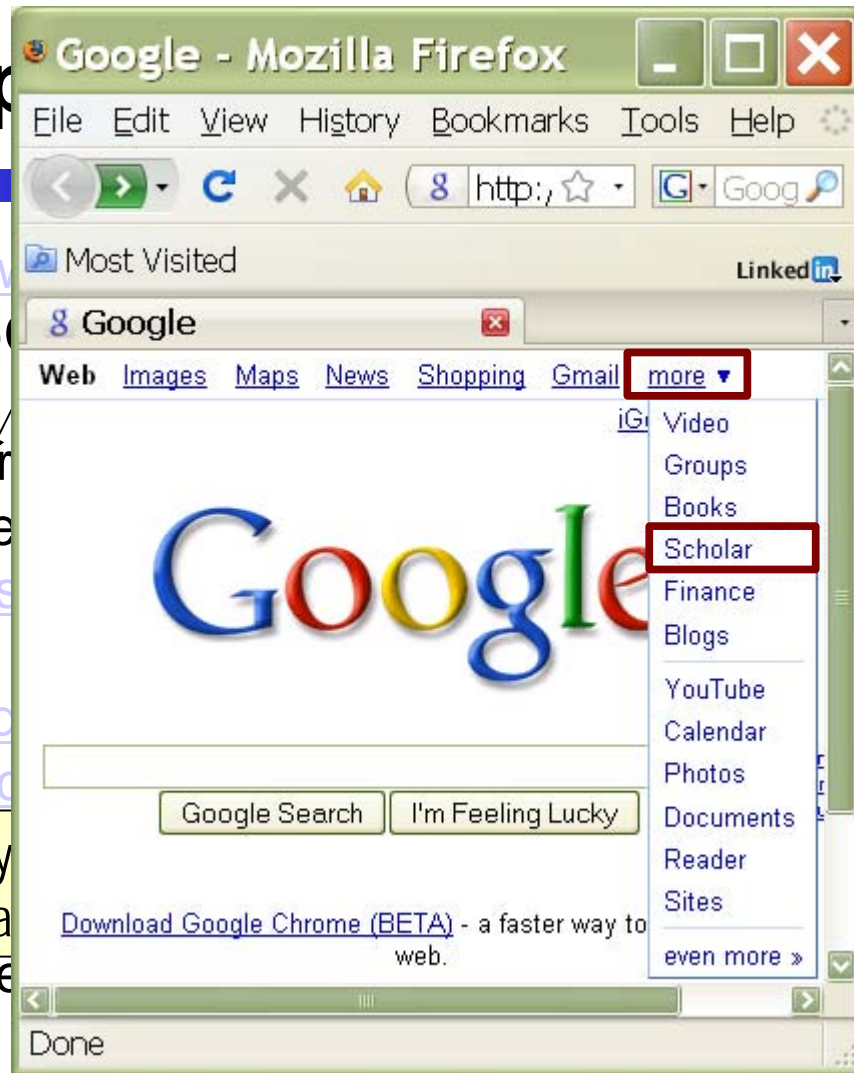
Summary

- Devise a (flexible) plan.
- Get started...don't procrastinate.
- Find the right leader.
- Assemble the right team.
- Keep management informed of (small) progress.
- Never stop. The path will be bumpy but over time you'll get better and better.
- As the French psychologist Émile Coué said, "Every day, in every way, I'm getting better and better." So it is with CPI.



Additional "Cheap"

- The Software Engineering Institute: [www.sei.cmu.edu](#)
- Sw Process And Measurement (pod) [www.spamcast.libsyn.com/](#)
- SSC San Diego Process Asset Library
- Tao Xie's Software Engineering Research <http://people.engr.ncsu.edu/txie/seres>
- How to ask questions the smart way: <http://www.catb.org/~esr/faqs/smart-questions.html>
- Virtual SPIN: <http://linkedinspin.ning.com>
- Dilbert: dilbert.com ← Dilbert works in your office. Have a good one!
- Practical SW & Sys Management (me)
- Your favorite search engine. ←



Don't forget Google Scholar.

Google Scholar... a way to search for scholarly literature. You can search across many disciplines and sources: peer-reviewed papers, theses, books, abstracts and articles, from academic publishers, professional societies, preprint repositories, universities and other scholarly organizations.



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