CMMI® Institute Global Congress Seattle 2015

Agile Transformation:
Gaining or Maintaining CMMI

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BROADSWORD
Process Innovation at the speed of life

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Has anyone ever said THIS to you about agile …

"Agile teams are free-for-all Jolt Cola drinkers who don't understand or care about the business side."

"Let's be more agile! But how about if we only have a weekly Standup?"

"Let's transition all of our projects over to agile by February!"

"Sure, go ahead and be agile! Just don't bother the customer!"

"Be agile! And use project managers!"

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Or have they told you THIS about CMMI …

"CMMI is too document-heavy …"

"CMMI is going to make us bureaucratic …"

"CMMI is a rigid, command-and-control bunch of nonsense…"

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The Challenge: Agile Transformation and CMMI

= Greatness

Some are born great, some achieve greatness, and some have greatness thrust upon them. Your fate awaits you. *William Shakespeare*

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Welcome to …

Agile Transformation: Gaining or Maintaining CMMI

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Performance Management
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Adventurer

"You cut through the noise and get us to the solution"
- From the client who named our company "Broadsword."

http://www.askTheCMMIAppraiser.com
http://www.broadswordsolutions.com

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Broadsword is a Performance Innovation company that uses agile methods to implement solutions, including:

- Agile Transformation
- CMMI
- Performance Management
- Multi-Model Improvement
- Organizational Training

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The Challenge

- Attracting and maintaining the best employees
- Working with changing requirements
- Reducing time to delivery
- Working in teams
- Managing Budgets and Risk
- Understanding Project Progress
- Customer Satisfaction
- Predictability

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The Plan

- Use CMMI to become Agile
- Use CMMI to strengthen Agile

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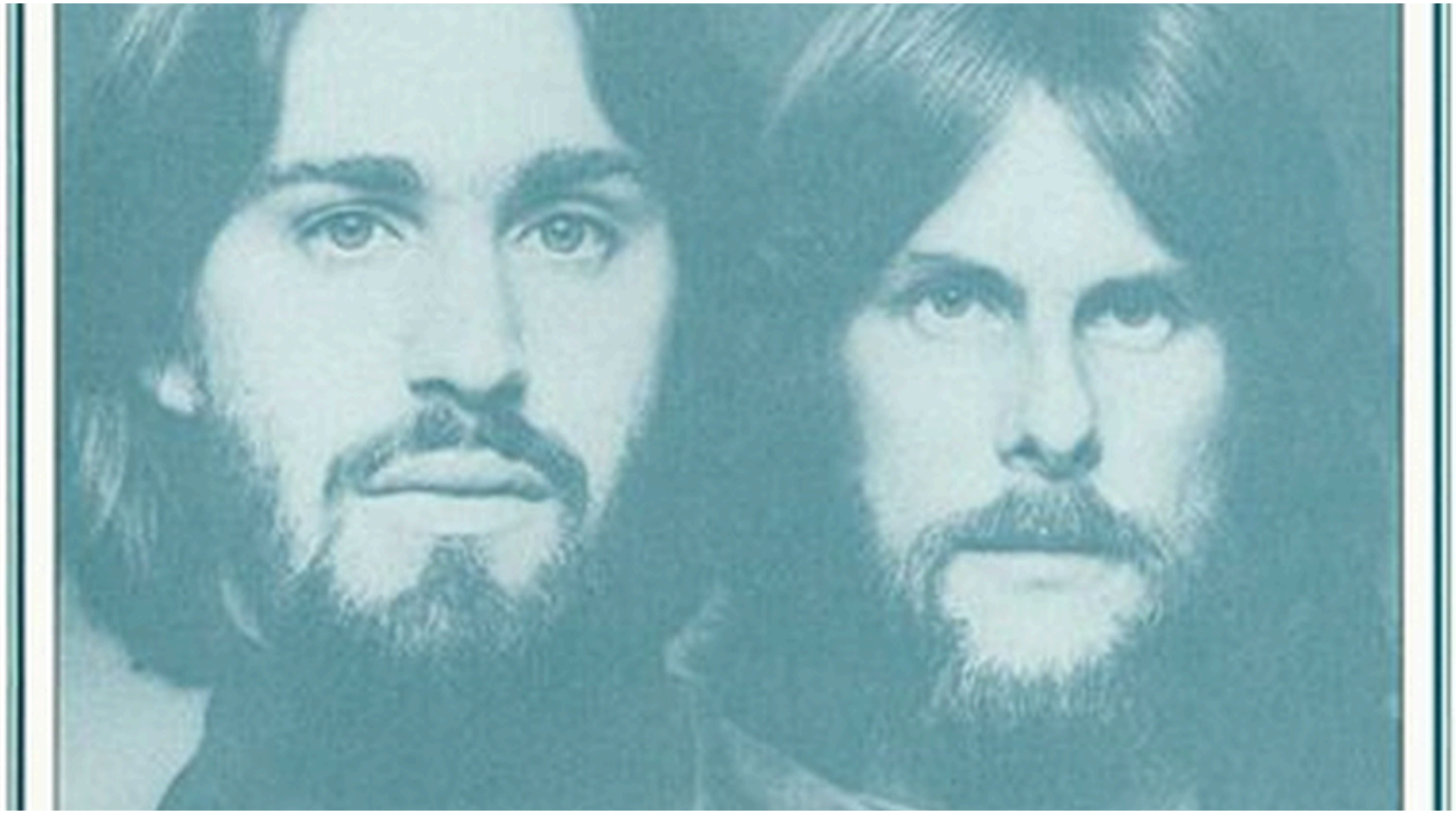
Are we really that different? Or are we . . .



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CMMI and Agile don't look alike, and have different personalities, but . . .

- they have the same blood running through them
- they were both fathered by the idea that the industry needs to do some things better
- they are at their best when they work together
- CMMI reminds us what to do - a comprehensive integrated set of guidelines and best practices for great organizations
- Agile gives insight in how to do it - continual planning, self organizing teams, customer interaction, fail fast, iterate, collaborate, and deliver rapidly

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Ways that CMMI strengthens ***Agile***

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Idea #1: Collaborate with management on a set of common Agile Values

Work together to establish *Agile Values*

- transparency,
- collaboration
- working iteratively and incrementally
- people over processes
- working software over comprehensive documentation
- failing-fast

The CMMI's *GP2.1: Establish an Organizational ~~Policy~~ values*

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Idea #2: Decide how your organization will plan for how you will do everything you do.

Agile Planning

- release and sprint planning.
- how will we do daily stand-ups, retrospectives, and backlog grooming? how will we roll-out and deploy Agile values, methods, and techniques?
- hat estimation methods and tools will we use?

The CMMI's *GP2.2: Plan the Process, PP, PMC, IPM RSKM et. al.*

Tip: Events such as code reviews and retrospectives improve code quality. They include people, collaboration, and work products. Plan them out in advance to get maximum, consistent value.

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Idea #3: Provide appropriate Resources for your Agile Teams

Agile teams may need:

- co-located work spaces,
- planning poker decks
- pair programming desks
- software tools (JIRA, TFS, etc.)
- Product Owners, Scrum Masters,
- white boards, sticky notes, markers, blue painter's tape . . .

CMMI's GP2.3 Provide Resources for more guidance, as well as Supplier Agreement Management, Integrated Project Management, Integrated Project Management and Technical Solutions.

Tip: Scrum Teams that are virtual will need special consideration with stronger tools and additional training and mentoring.

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Idea #4: Clarify Roles, Responsibilities, and Authorities for Agile Teams
Idea #5: Make sure everyone knows your common set of Agile values, Frameworks, and Techniques.

Agile Roles Product Owners, Scrum Masters, team Members, customers, users, managers . . .
Agile proficiency Who needs training?
scrum masters, product owners, team members
. . and sometimes customers

CMMI's *GP2.4 Assign Responsibility* nails it . .
CMMI's *GP2.5 Train People and OT so that you can*

Tip: A Team Agreement (roles). **Training effectiveness – can each team member train the content to others?**

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Idea # 6: Develop Lightweight Agile Documentation

Agile artifacts have value to both the local team and the rest of the organization.

- use a camera to capture scrum boards
- Jira or TFS can record information

Generic Practice 2.6 Control Work Products, CM

Tip: A common repository can record your process definitions so all teams can benefit from the assets you've developed.

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Idea #7: Know who needs to be where and when (and keep track)

People and collaboration are key to any Agile Transformation. In fact, they are the MOST important reason for Agile success!

- Who attends Sprint Demos, Release Planning, code reviews?
- How do you know all of the right attendees are participating?

Doesn't the *CMMI's GP2.7 Identify and Involve Relevant* Stakeholders

Tip: *TeamScore* is a common Agile metrics that indicates project risk by letting you know if the right people are at the right place at the right time.

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Ideas #8, #9, and #10

- how well is you're your team performing?
- are your techniques working?
- are team members adhering to your Agile Values?
- who cares?

GP 2.8 Monitor and Control the Process, MA
GP 2.9 Objectively Evaluate Adherence
Maybe *GP 2.10 Review Status with Higher Level Management* If management isn't involved and engaged in Agile, it isn't going to happen and it isn't going to improve.

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Idea #11: Be Agile … BUT do what's right for each project!

One size doesn't fit all . . .

Keep calm . . .

- different teams might have different sprint durations, different velocity, and even a different set of techniques
- this needs to be done with guidelines to ensure alignment with Agile Values
- reating guidelines is tough, but well worth it

Generic Practice *GP3.1 Establish a Defined Process,* OPD

Tip: Create solid guidelines that will allow Agile teams to deviate when it makes sense for their project.

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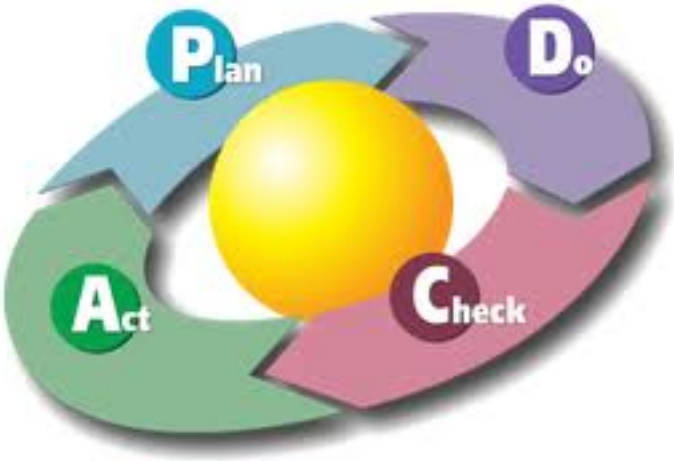
Idea #12: Share your lessons and best practices!

Agile teams have retrospectives to improve their performance. **Agile organizations** know when the results of these ceremonies will benefit the bigger team… be sure to share successes (and failures) across the larger organization.



A "Scrum of Scrums" approach can be applied to gather retrospective results from multiple Agile teams.
GP3.2 Collect Process Related Experiences

Tip: Build a SYSTEM of Retrospectives to ensure OTHER projects learn from your successes and mistakes.

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Try this . . . FOUR THINGS you can do using CMMI to stay on the Agile Journey

1) Transition from Status Meetings to Daily Standups
2) Transition to an Iterative and Incremental Release Cycle
3) Begin Conducting Retrospectives on All Projects
4) Develop an Agile Resiliency Architecture for Agile Transformation

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1) Transition from Status Meetings to Daily Standups

- Meet weekly or monthly
- Everyone settles in with their laptop
- People come and go to make calls
- Extended stakeholders
- Management in attendance
- Walk through Project Plan
- Walk through Risk Log
- Each Person gives a status
- Management talks for an hour
- No time limit on the meeting
- Meet whether we need to or not
- Some people don't ever show up

- Meet daily for 15 minutes
- Everyone stands – no laptop
- No phones allowed!
- Core team plus Product Owner
- No management in attendance
- What we did, what we're doing, what's blocking us
- Fifteen minute time limit
- Meeting everyday builds team
- All team members attend, unless on PTO

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2) Transition to an Iterative and Incremental Release Cycle

- Yearly releases
- Traditional SDLC
- Big Plan up Front
- Massive Requirements Spec
- Robust Change Control
- Change Control Boards
- One Single Software Release
- Long Testing Cycle
- Requirements, Team, management, and customers change during the release

- 1-4 week Sprints
- Short Releases made up of 1 or more sprints
- Work off of a product backlog
- Product owner speaks for the customer
- Design, code, test within each sprint
- Sprint demos for customers at the end of each sprint
- Team stays intact throughout the sprint

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3) Begin conducting Retrospectives for ALL projects

- "Lessons learned" logs are created after a multi-year project
- Attended by cast of thousands
- No one every reads them because they are not relevant
- They are stored in a unknown place
- Projects never learn
- Organization never improves

- Retrospective is held every 1-3 weeks (after each sprint)
- Attended by Agile team and Product Owner
- Results are categorized by process, product, and project
- Results are stored in a WIKI
- Teams access WIKI when planning for the next Release or Sprint

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4) Develop an Agile Resiliency Architecture

An ARA ties the Techniques and Frameworks you use to the Agile Values of your Organization.

"Guiding the work"

Values include "Fail fast, iterative and incremental, collaboration, focus on people, continuously improve.

"Managing the work"

Methods include Scrum, XP, Kanban, Spiral, Crystal, RUP, etc…

"Doing the work"

Techniques including *"Planning Poker," "Daily Standup," "Retrospectives," Sprint Demo," "Story-time"*

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What are you waiting for?

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Thank you for attending!

Text agileCMMI to 313131
to determine how ready you are to begin your organization's Agile Transformation!

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