



**Carnegie Mellon
Software Engineering Institute**

Pittsburgh, PA 15213-3890

Tools of the Change Warrior

Change is hard, especially when you are leading.

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Overview

Why Change? It is all about improvement and thus it is always about change.

The role of TSP Coaches is to coach team members, team leaders, teams, management, and organizations through continuous improvement.

This presentation is an overview of some of the “soft” skills needed.



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“I made that!”







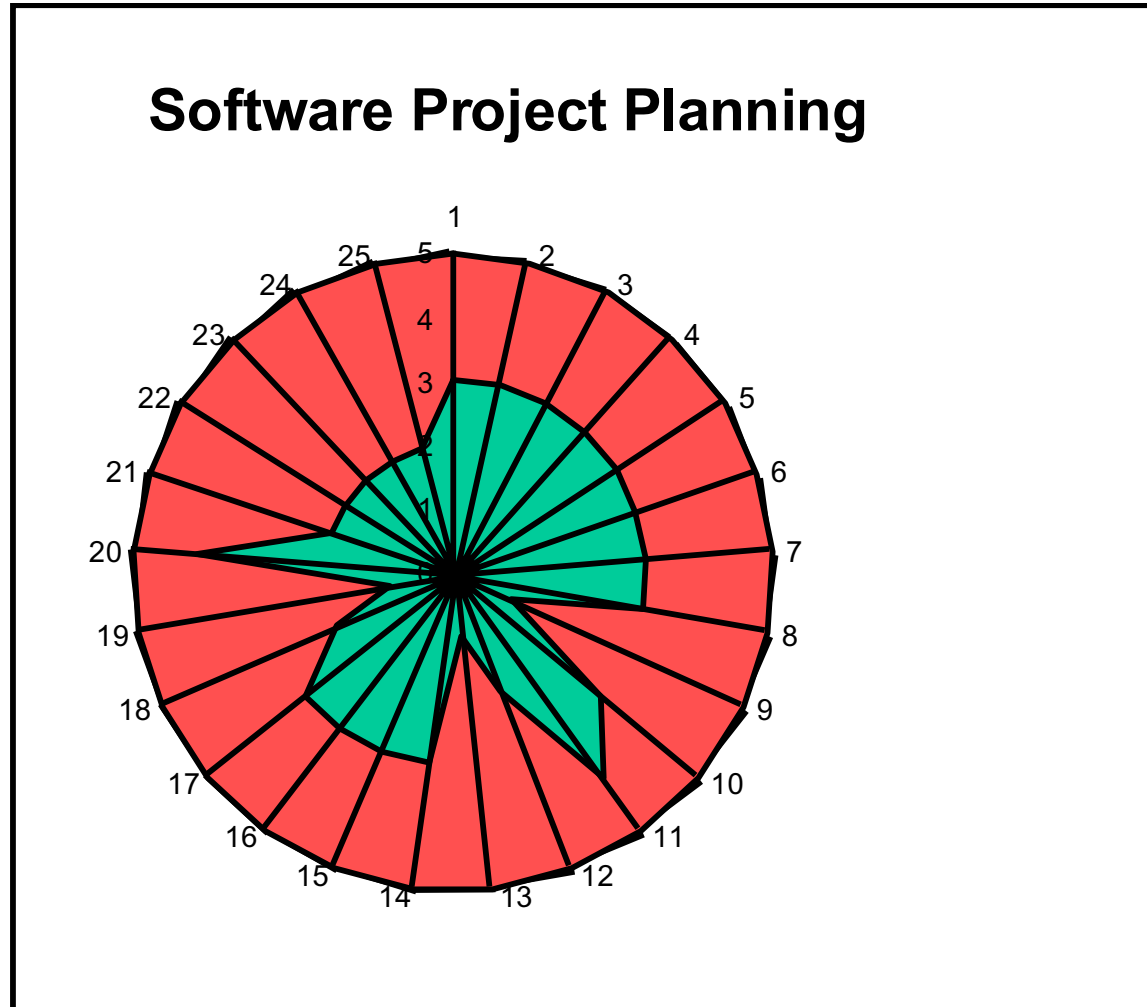
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Change Warrior Version 1.0





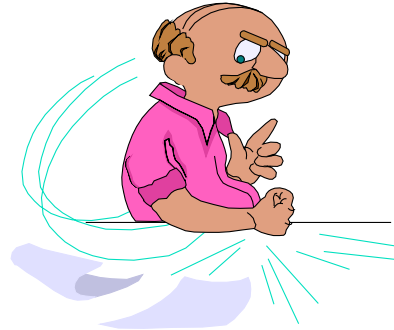
An Example CMM Rating Chart





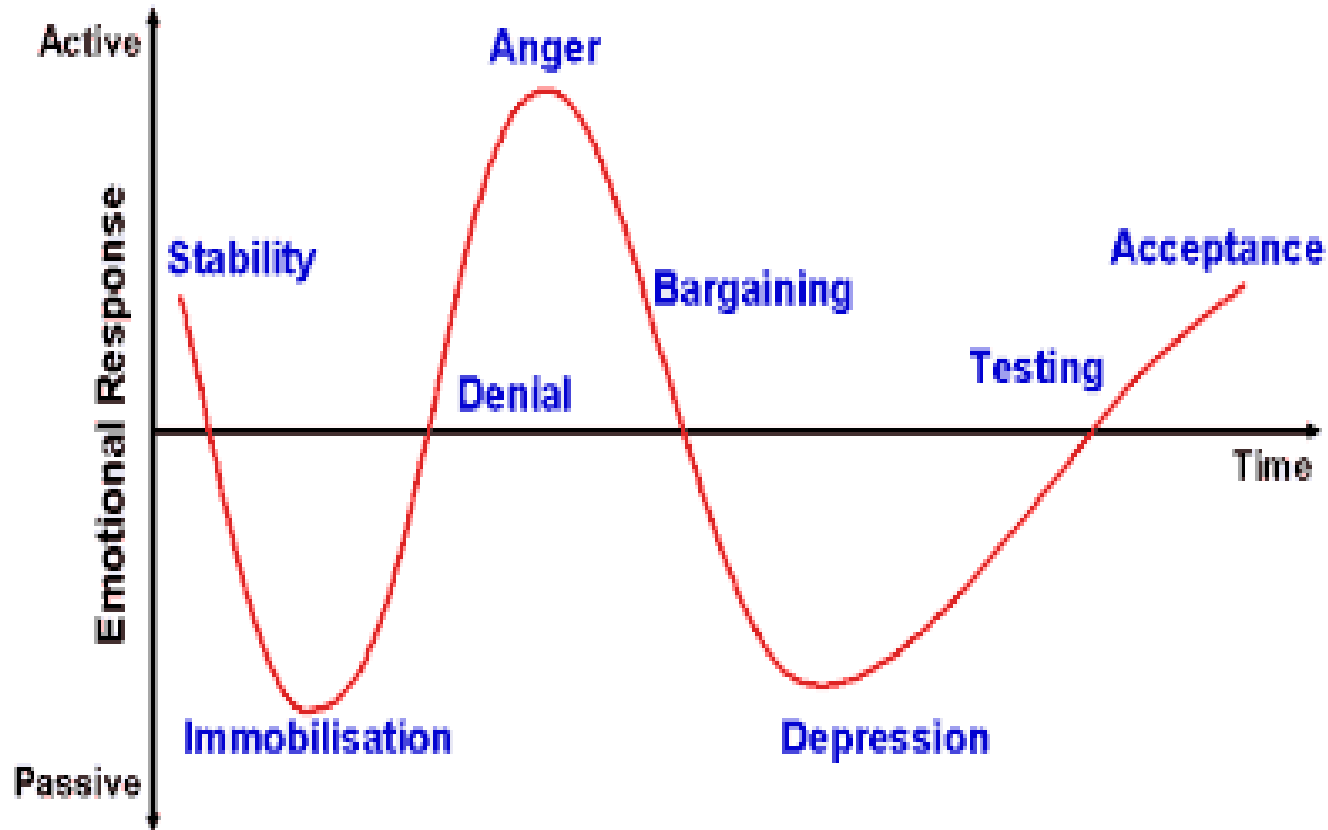
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Responses





The Grieving Cycle



http://changingminds.org/disciplines/change_management/kubler_ross/kubler_ross.htm



Culture Change

A culture is a self reinforcing system.

A culture is a group of people sharing a “system of belief”.

The longer the history, the deeper the roots of those beliefs.

Culture change is about changing how people behave.

It is changing their “minds”.

PLANNING ISSUES

Examples of Known POTHOLES
 - design bandwidth
 - overloaded CM
 - goals, reqs, design "too slow"
 - known new reqs, requests coming

LACK OF INTEGRATED END TO END DEVELOPMENT PROCESS/ PLANNING PROCESS

- Participating orgs are often viewed as "not connected"
- entry /exit of phases is not understood
- There is no end to end plan (or replan)
- Existing plans don't encompass all work

ASSUMPTIONS CHANGE WITHOUT RENEGOTIATION OR REPLAN

- don't fill TBDs, SPARs come in, ...

??? lack of confidence that the process will produce the overall schedule required ??

LACK OF PROCESS COMPLIANCE

- process not right
- schedule pressure

late starts
 Events occur in large stressful bunches (Bow Waves)
 Design Starts Before Reqs, Code Before Design
 process isn't repeatable
 Defects happen & found late
 known "potholes" are hard to steer around
 can't get right people together at same time
 More Work with Same Resources
 creates intense schedule pressure

MANY PEOPLE DON'T CONSIDER "NO" OR "LATER" AN OPTION. ITS JUST "THATS HOW IT IS"

"PROVE YOU CAN'T" CULTURE -CANNOT SAY "NO"

TERTIARY EFFECTS

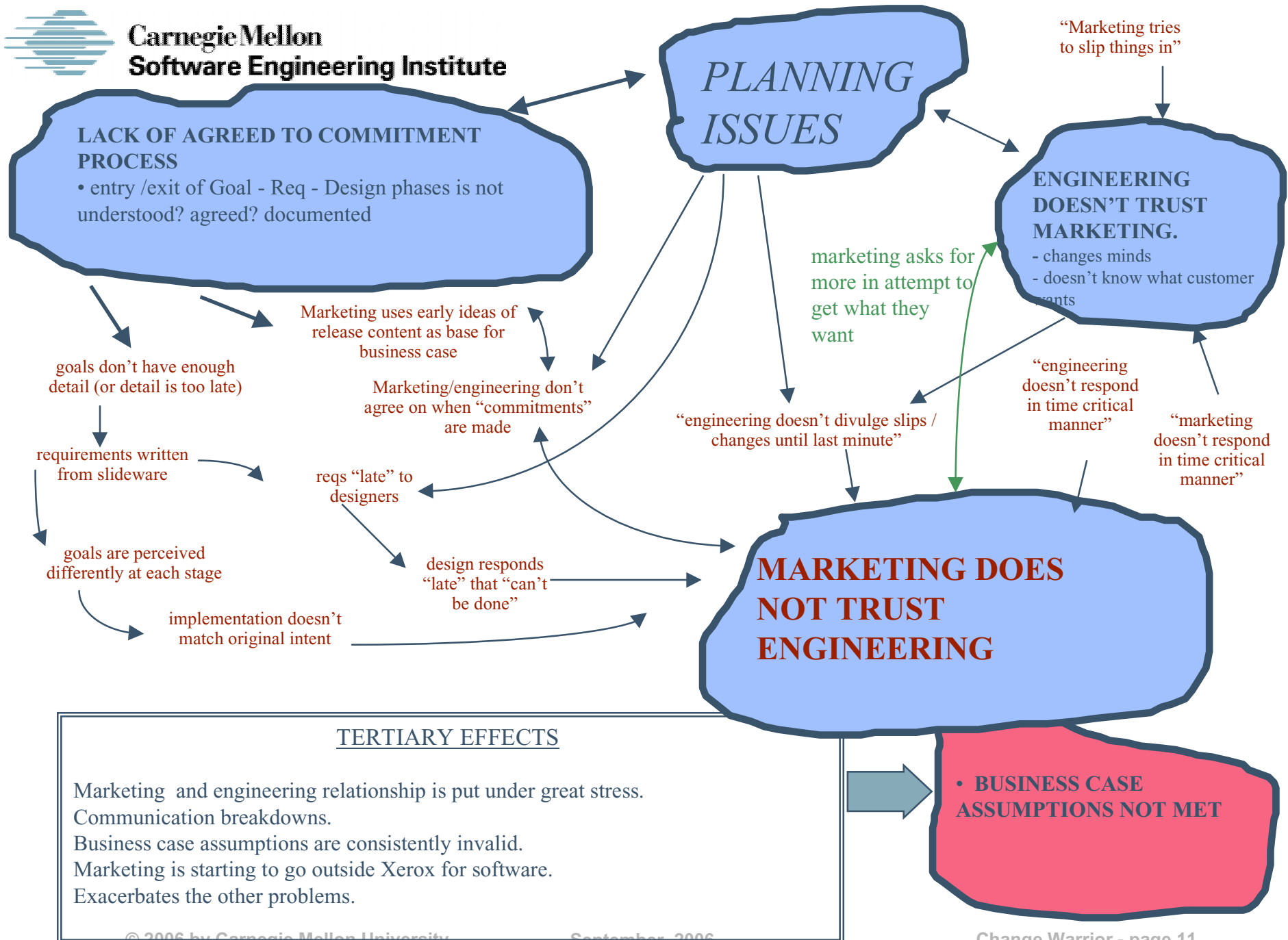
Management doesn't have enough time to work improvements, oversee the process. People are in a highly fragmented work mode (interrupt driven, not very productive) Priorities seems to constantly shift. ("Nothing is stable, even for a day.")

Planning process deteriorates; inadequate consideration of

- Contingencies/Risks
- Impact Analysis
- Commitments being made or missed

Marketing and engineering relationship is put under great stress.

•High Rework
 •Less Feature
 "Richness" than desired





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Responses





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Tool Summary 1

CMMI

Audits

Grieving Cycle

System Thinking

Culture



Change Warrior Version 2



Some other cool stuff...



Launch Meeting 4 Example

Team Member: *I estimate that task to take 100 hours.*

Team Leader (coming out of chair, loudly, with passion):

You're killing us!



Giving Feedback

Some elements of giving feedback that can help you be heard.

- **Within yourself, if possible, remove judgment**
- **Concisely tell what you perceived**
- **Concisely tell what possible meaning you draw from your perception**
- **Concisely tell how you feel about that perception**
- **Listen**

Reference: [What Did You Say? The Art of Giving and Receiving Feedback](#)
by Charles Seashore, others.



The Response

TSP Coach: Before we review and change estimates, I want to ensure we get through the whole list.

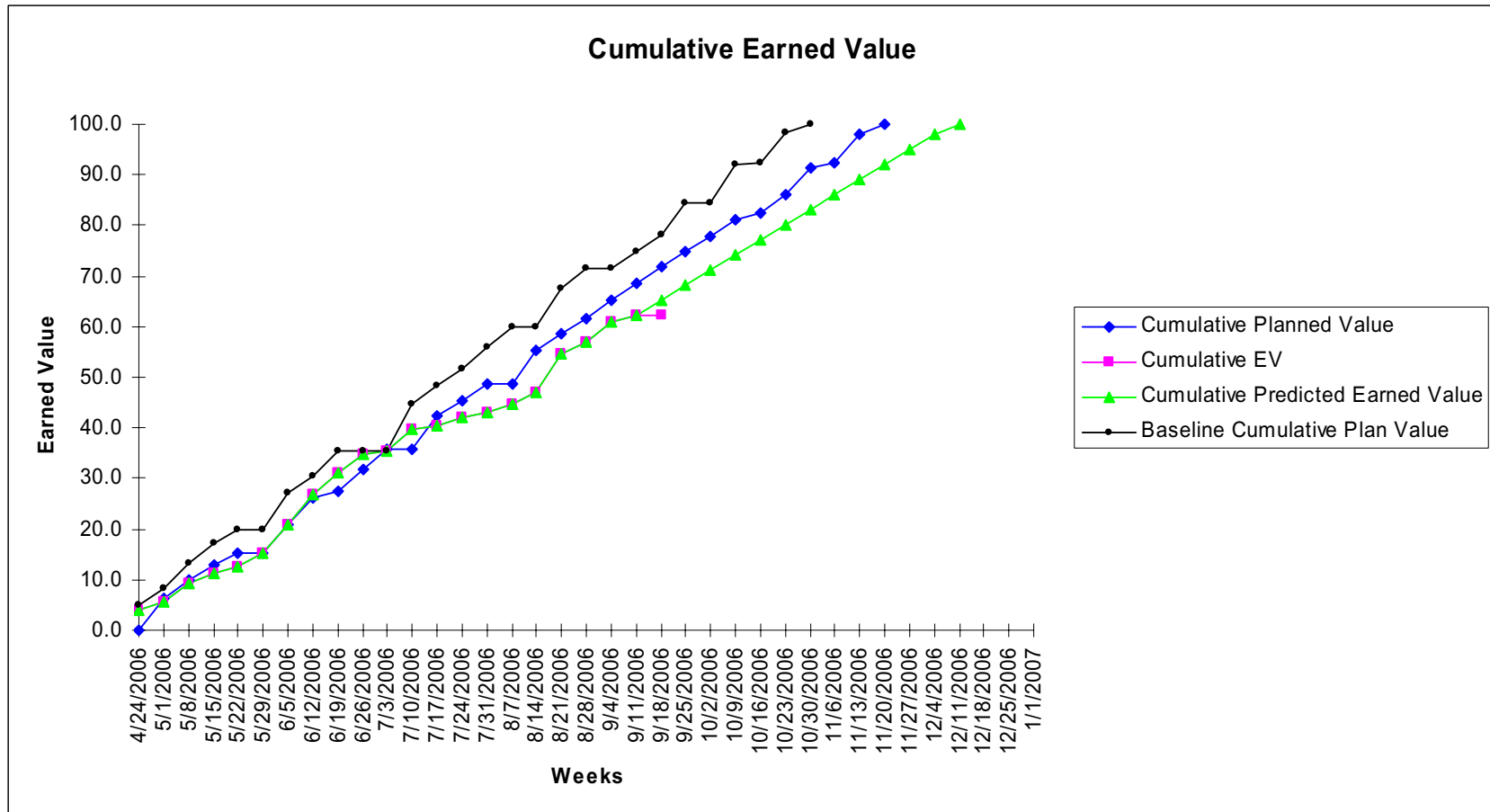
The TSP Coach waited a few minutes, until the team was going through stuff at a reasonable pace, privately took team leader out of room.

TSP Coach: The way you rose out of your chair and raised your voice made me wonder what was up for you?

TSP Coach: I would like to give you some alternative suggestions for achieving your goals. Are you open to them?



Typical EV Chart for this Organization





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“Management works *in* the system.
Leadership works *on* the system.”

Stephen Covey



Special Event with Management Team

- “Is it okay to finish early?”
- “Do not be as soon as possible – be as sure as possible!”
- A plan for setting expectation



Expectations of Excellence

- Build a product the customer will truly appreciate.
- Quality is key.
- Create a plan that makes an “as sure as possible” commitment.
- Variance Happens – understand variance and use data and process to minimize.
- Minimize late surprises.
- Use data to guide continuous improvement (Customer Satisfaction, Quality, Predictability, Productivity)



Tools Summary - 2

Survival Rules

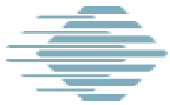
Receiving and Giving Feedback

Pilots as a tool for cultural understanding

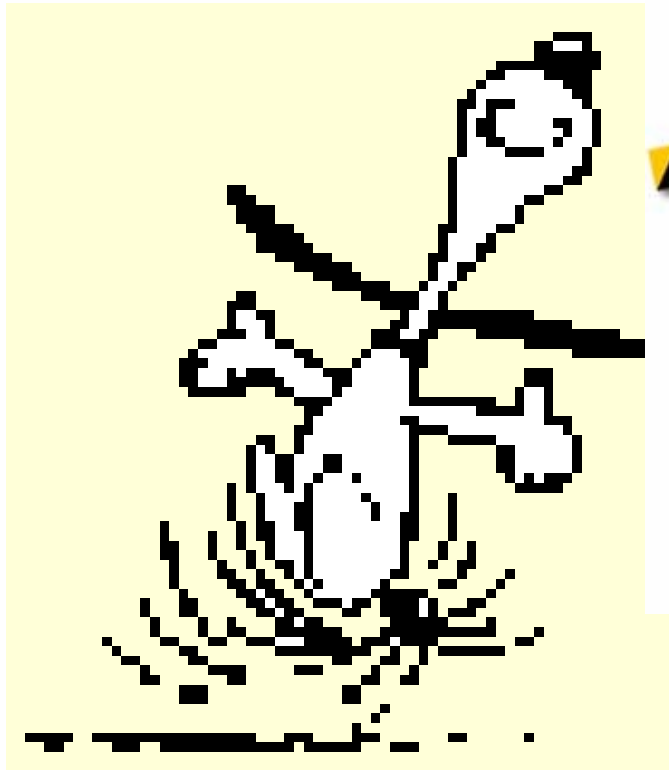
Cognitive Dissonance

Story Telling

Setting Expectations



~~Change Warrior Version 3~~ Change Wizard Version 1.0





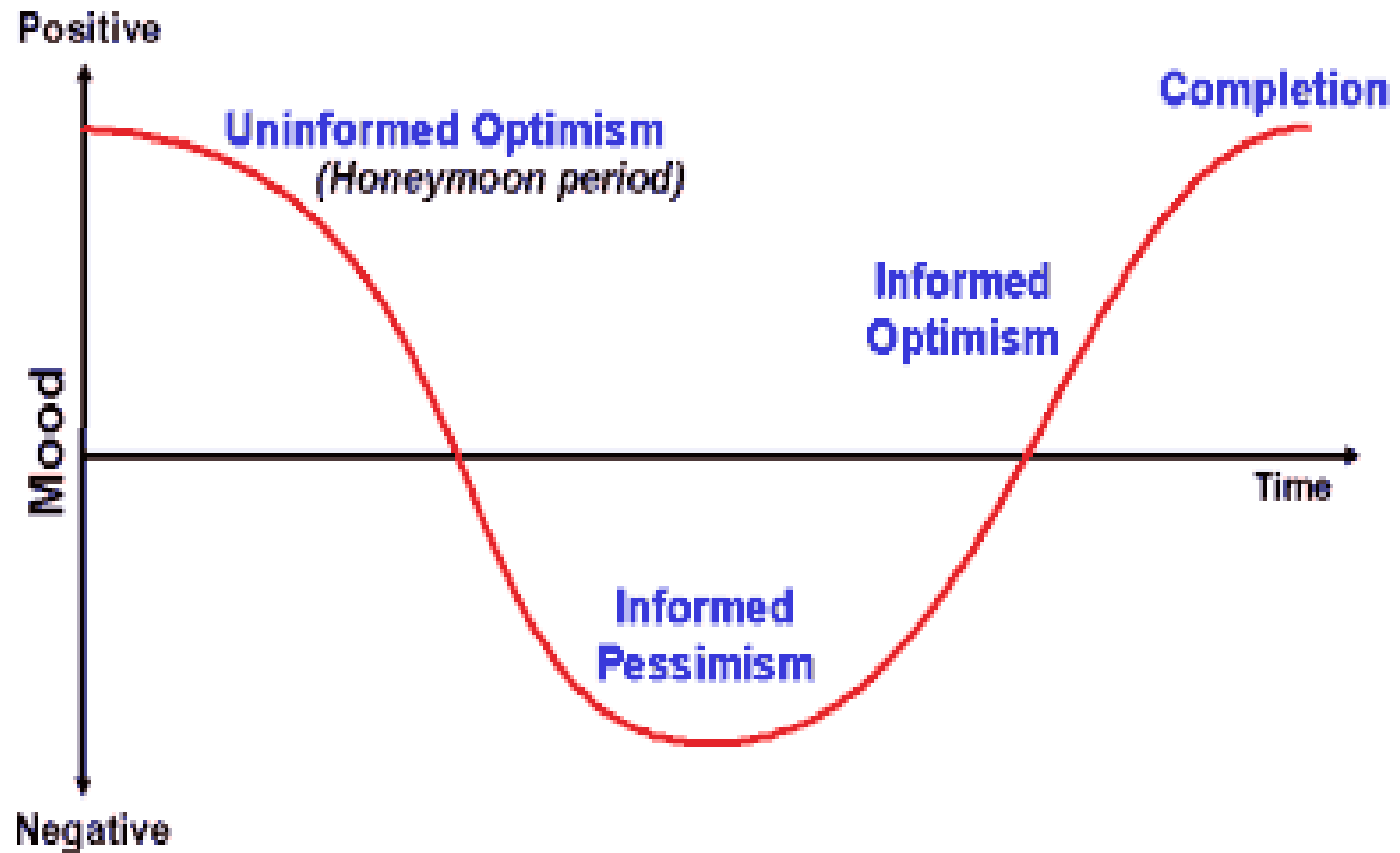
Satir Change Model



Reference: Gerald Weinberg, Quality Software Management Volume 4



Positive Change Cycle



http://changingminds.org/disciplines/change_management/psychology_change/positive_change.htm



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Proactive Tools

Framing / Re-framing

Model the Change You Want to See

Backward chaining



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A Sampling of Change Tools

Sense making

Sense making

Audit

Pilots as cultural probes

Types of Teams

Mars and Venus

System Thinking

Strategies for Change

Pearl

Embrace and Extend

Model Based

12 o'clock High

Linking Initiatives

Building Coalitions

Back chaining

Understanding Change

Change models

Grieving Cycle

Positive Change Cycle

Language of Change

Framing

Setting Expectations

Meme

Metaphor / Story Telling

Giving/Receiving

Feedback

Truth telling

Socratic questioning

Appreciative Inquiry

Personal Management

Be the Change

“Circle of control, of influence, of concern”

Courage

Compassion

Patience

Listening

Congruence



***I get up every morning determined to both change
the world and have one hell of a good time.
Sometimes this makes planning my day difficult.
E. B. White (1899 - 1985)***



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