

In-the-SPIN

Newsletter of the

Boston  SPIN

Issue 25, March, 1999

Editor: Carol Pilch

Editorial

Barbara Purchia provides a thought-provoking analogy to project management for this month's SPIN Perspectives column. After reading this article, analogies that you have come across in your work experience may come to mind. A recent publication from the Software Engineering Institute also provides serious content in an amusing format. The paper is entitled "Quotations from Chairman David, A Little Red Book of Truths to Enlighten and Guide on the Long March Toward the COTS Revolution." The subject is the use of commercial software products ("COTS") in complex systems. Checkout:
<http://www.sei.cmu.edu/publications/documents/99.reports/lrb/little-red-book.html>.

This month's edition of In-the-SPIN also contains a Feature Article on the expected contents of the CMMI-SW V0.2 that will be released this month for public review. This article is a continuation of a series that began in last month's In-the-SPIN. The specific focus this month is on the changes that will be seen in Level 3 of the model. Because of the inclement weather on the night of the scheduled February SPIN meeting and the cancellation of the meeting, a Meeting Summary is not included in this edition of the newsletter.

Consistent with the Boston SPIN charter, *In-the-SPIN* is provided by the Boston SPIN as a means of supporting the free and open exchange of software process improvement experiences and ideas. The steering committee encourages feedback on the newsletter as well as broader participation in the content and production of the newsletter. I'd like to hear from you. If you have an article you would like to publish in this newsletter, send it to carol.pilch@gsc.gte.com.

Boston  SPIN *Software Process Improvement Network*
Since January 1993

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GTE Government Systems, Needham, MA

We thank the Computer Science department of UMASS- Lowell for providing support and hosting our Web page

SPIN Perspectives

This month's SPIN Perspectives article is contributed by Barbara Purchia, Director, Engineering Operations, Kronos, Inc. Barbara is Chair of the Boston SPIN Steering Committee.

Manager's Responsibility Code



A few weeks ago I went skiing and was reading the Skier's Responsibility Code on the back of the trail map. The Code struck me as something that not only applies to skiing but to management (and life in general) as well. I took the liberty of reworking the Code (with a little help

Harris). Happy trails!

Manager's Responsibility Code

There are elements of risk in managing that common sense and personal awareness can reduce.

1. Manage in control and in such a manner that you can stop or avoid problems on projects.
2. Do not promote yourself at the expense of others.
3. Keep in mind the larger system into which your project fits.
4. You must not stop where you obstruct another project or are not visible from above.
5. When entering a project, don't sabotage other projects that are already started by stealing resources from them.
6. All managers shall use safety devices, such as project

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planning and risk management, to help prevent runaway projects.

7. Managers shall learn from their own and other previous experiences to avoid previously discovered traps and pitfalls.
8. Follow the process.

Manage With Caution

Be aware of changing conditions. Natural and manmade obstacles exist. Requirements changes, headcount reductions, and reorganizations may be continually in progress on the project. Use caution and manage consistently; using and improving the processes in place. Managers should realize that falls and collisions do occur and injuries may result. Therefore, assume the burden of managing under control at all times.

Meeting Summary

The February meeting, scheduled for Thursday, February 25, was cancelled due to a snow storm.

Boston SPIN Calendar

Information about Upcoming Meetings

by Johanna Rothman, Program Chair

March Meeting Announcement

Topic: A Tailorable Mini-assessment Method

Speaker: Carol Pilch

When: Tuesday, March 16, 1999. 6:30pm-8:30pm
6:30-7:00 Networking and Round Tables
7:00-7:10 Announcements
7:10-8:10 Speaker's Presentation
8:10-8:30 Questions and Answers

Who: Everyone (Academia, Government, Industry)

Location: GTE, 77 "A" St., Needham MA.

Info: See our web page, <http://www.cs.uml.edu/Boston-SPIN>
For SPIN info, contact Johanna Rothman, 781-641-4046, or jr@jrothman.com

Abstract:

Software assessments are an important aspect of an organization's software process improvement program. Many organizations have found that conducting assessments can be time consuming, requiring significant preparation and resources. By defining a tailorable Capability Maturity Model (CMMsm) based software process mini-assessment method,

GTE has been able to accelerate the momentum for software process improvement to meet the demands of the GTE Software Quality Initiative. This initiative states an ambitious goal of having all software development sites within the corporation operating at an SEI Level 3 maturity rating by the year 2000.

This talk begins with a brief overview of the Software Engineering Institute's CMMsm Based Appraisal for Internal Process Improvement (CBA IPI) on which the mini-assessment is based. The GTE mini-assessment method is then described. The method includes guidelines for planning, preparing for, and conducting a mini-assessment. Options for tailoring the approach and reducing risk in order to ensure accuracy and completeness are provided. Reusable mini-assessment assets are utilized to improve efficiency and ensure consistent application of the method. A comparison with the CMM Based Appraisal for Internal Process Improvement (CBA IPI) method is made to highlight the mini-assessment's benefits and limitations.

About the Speaker:

Carol Pilch has over 20 years of software development and management experience. For the last 5 years, Carol has been leading software process improvement activities at the GTE Government Systems Corporation, Communication Systems Division, Needham MA location. Carol is an SEI-authorized Lead Assessor and frequently leads and participates in assessment teams.

Directions: From Route 128 in Needham, take exit 19A onto Highland Avenue East. Take your first right by the Ground Round and take your second left onto "A" Street. GTE is the last building on the right. Enter the parking lot by the GTE sign and come into the building by the cafeteria entrance, which is located to the left of the main entrance. There will be a security guard at the entrance.

Snow cancellations: We will notify the membership via email to the SPIN distribution list, post the notice on the SPIN web page, and announce the cancellation on Channel 7 TV and radio, WRKO AM 680.

Looking for Interesting Speakers

We are always looking for interesting speakers. If you'd like to speak at Boston SPIN, please review these criteria before sending us an abstract:

Speaker Guidelines:

1. Boston SPIN looks for relevant topics facing software groups who want to improve their processes. Particular relevance to recent advances/ changes in this field are particularly welcome.
2. Preference is always given to speakers who present information pertaining to actual experiences in the field as opposed to purely theoretical presentations.

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3. Our membership attends hoping to learn how they can enhance their own results. We request proven, practical detail in your presentation.
4. The presentation should be based on the presenter's personal experience.
5. If you are a vendor or a consultant, remember that the most effective presentations are those where you explain your area of expertise and show how to be effective. Please do not use your time at Boston SPIN as a sales pitch.

We developed a speaker checklist so that none of us would have to rely on our short term memories. Please use the checklist to prepare for your SPIN talk.

Speaker checklist:

1. 60 days in advance of meeting: deliver 2 paragraph abstract, one paragraph bio to jr@jrothman.com
2. Within one week of meeting date: If desired, email copy of paper or overheads to heimann@world.std.com so that it is downloadable from the SPIN web page.
3. At the meeting: Speaker provides one copy of overheads to Charlie Ryan for our library.
4. Optional but highly recommended: bring 50-60 copies of overheads to SPIN meeting.

If you have information you'd like us to hear, please send an abstract to Johanna Rothman, jr@jrothman.com. Or, contact Johanna at 781-641-4046.

Monthly Round Tables

What: These are focus group or "birds-of-a-feather" sessions. They provide a professional forum for sharing information and experiences, for learning about other techniques, and for finding out that you are not alone.

Do you need or want to share information about handling thorny situations at work? Do you wonder what metrics are most important? Quality, scheduling effectiveness, time to market...? Would you like to know how to manage a project that you have just been thrust into in mid stream? Could you benefit from leading edge approaches and innovative solutions for handling current project challenges? In an effort to elevate your organizational ranking from SEI CMM Level 2 to Level 3, are you in search of Lessons Learned from other survivors? Would you like feedback from the diverse backgrounds (Government, commercial, industrial, consultants) on topics related to your projected career moves?

Propose your wish list or questions as a Round Table and get your information from the movers and shakers in the software community. Round Tables are generally informal discussions, with a facilitator, to stimulate and moderate discussion.

A member of the SPIN Steering Committee will assist as Scribe for the discussion. Round Table proposals may be submitted by posting a sign-up sheet with the SPIN Steering Committee Round Table Coordinator, Caroline Starita (staritac@amp.com). Proposed Round Table sessions will be

posted for sign-up prior to the monthly meeting in order for attendees to register their interest.

When: 6:30 - 7:00 PM, before SPIN Meetings

For further roundtable information, contact Caroline J. Starita, 978-442-4004 or staritac@amp.com or see the Boston SPIN web site, <http://www.cs.uml.edu/Boston-SPI>.

Future Program and Speaker Schedule

Date	Speaker/Topic
Apr. 20, 1999 @ GTE	Cem Kaner "Good Enough Testing or Bad Software"
May 18, 1999 @ GTE	Chip Groder "GUI Testing"
June 15, 1999 @ GTE	Open

Feature Article

This month's Feature Article is contributed by Carol Pilch. Carol is with GTE Government Systems and specializes in Software Process Improvement.

CMMI-SW V0.2 (formerly CMMSM V2.0, Draft C)



Version 1.1 of the CMMSM for software has been under review and revision for over two years. The SEI is planning to release the revision as CMMI-SW V0.2 for public review in March 1999. Last month, I provided

a general description of the changes that the user community will see in the latest version of the model along with specifics for Level 2. This is a continuation of that description with specifics for Level 3.

Level 3 Specifics – CMMI-SW V0.2

General emphasis for the Level 3 Key Process Areas (KPA) is placed on qualitative process improvement and building on the concept of a repeatable process at Level 2 through organizational learning. Project history, metrics, and lessons learned are instruments to effect improvement of organizational and project practices. For example, the number of times a project is replanned and the effectiveness of the replans is recorded and analyzed.

An institutionalization goal has been added to each Level 3 KPA. This means that institutionalization will be an explicit rating component for assessments and evaluations. Practices are institutionalized when they are recognized across the organization as "the way we do business".

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- **Organization Process Focus**

The emphasis of this KPA has shifted from software process management in Version 1.1 to software process improvement in CMMI-SW V0.2.

- **Organization Process Definition**

The notion of an organization's standard software process family has been introduced. References to the organization's software *process* database have been changed to refer to the organization's software *measurement* database. (This will eliminate confusion caused by the earlier wording of the practice as "...use of the organization's software process database is coordinated...".")

- **Organization Training Program**

The purpose of this KPA is to develop the skills and knowledge of individuals so they can perform their software roles effectively and efficiently. In addition to the institutionalization goal, a goal has been added that explicitly addresses the training needs of projects and support groups.

- **Integrated Software Management**

The focus of this KPA has been changed to emphasize its differences from the Software Project Planning and Software Project Tracking and Oversight KPAs, rather than the similarities that were emphasized in CMM Version 1.1. Reference is made to tailoring the organization's standard software process family. A risk management goal has also been added to this KPA.

- **Software Product Engineering**

The scope of this KPA has been expanded on both ends of the life cycle. This includes requirements elicitation and systems analysis, delivery and installation, operations, support, and maintenance. This KPA has been extensively rewritten to include four goals, doubling the number of goals. Verification that the software technical products satisfy their requirements is an explicit goal. The delivery of products and support to the end users is also an explicit goal.

- **Intergroup Coordination**

The purpose of Intergroup Coordination is to actively participate with the other groups involved in the software project to address the system-level and intergroup aspects of the project to better satisfy the customer's needs. A goal that addresses understanding customer requirements has been added. Measurement is used to obtain insight into the status and effectiveness of intergroup coordination. This includes tracking numbers, types, and severity of defects found in work products delivered internally from one group to another.

- **Peer Reviews**

The purpose of Peer Reviews is to remove defects from the software work products early and efficiently. An important corollary is to develop a better understanding of the software work products and of defects that might be prevented. A goal is included to establish a shared

understanding of software work products through participation in peer reviews.

In a future issue of In-the-SPIN, I will be providing information about Levels 4, and 5 of CMMI-SW V0.2. The complete CMMI-SW V0.2 is available for downloading from the SEI's web site:

<http://www.sei.cmu.edu/activities/cmm/draft-c-c-original.html>.

Note: SM Capability Maturity Model is a service mark of Carnegie Mellon University.



The Boston SPIN is a forum for the free and open exchange of software process improvement experiences and ideas. Meetings are usually held on third Tuesdays, September - June. Boston SPIN welcomes volunteers and sponsors.

For more information about our programs and events contact:

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For information about SPINs in general including ***HOW TO START A SPIN*** contact:

Dawna Baird of SEI (412) 268-5539,
dbaird@sei.cmu.edu.

IN THE SPIN is available on our Web page.

TO RECEIVE NOTIFICATION OF NEW ISSUES send email addressed to danallen@danallen.com. We have 2 separate email lists: one for this newsletter and one containing announcements that we receive from other process organizations and forward out.

TO ADD YOURSELF TO THE ANNOUNCEMENTS LIST send email to ryan@sei.cmu.edu.

Send letter-to-the-editor, quips, quotes, anecdotes, articles, offers to participate in the newsletter committee, and general correspondence to Carol Pilch, carol.pilch@gsc.gte.com.

Send job postings to heimann@world.std.com.

Back issues and other information about Boston SPIN can be found at our WEB HOME PAGE:

<http://www.cs.uml.edu/Boston-SPIN/>