

In-the-SPIN

Newsletter of the Boston  SPIN

Issue 35, March, 2000

Editor: Carol Pilch

Editorial

This month's edition of In-the-SPIN has a feature article contributed by one of our Boston SPIN members, Jack Hillman. Jack provides a synopsis of two articles on the subject of "just enough" process. If after reading Jack's article, you're interested in finding out more, you can check out the references to the complete articles which were published in the *Cutter IT Journal*.

If you missed the February meeting and Johanna Rothman's enthusiastic, interesting and informative presentation, check out the Meeting Summary column contributed by David Heimann. Also, if you're interested in hearing what the participants in the February roundtables have to say, check out our SPIN Perspectives column for the summaries of the three roundtables. The summaries are provided by our roundtable facilitators: David Heimann, Dolores McCarthy, and Carol Pilch.

If you're a reader of this newsletter, the Boston SPIN would greatly appreciate your feedback. The Boston SPIN, and in particular the editor, would like to know if the readers' expectations are being met.

The SPIN steering committee also encourages broader participation in the content and production of the newsletter. Send letters-to-the-editor, quips, quotes, anecdotes, articles, offers to participate in the newsletter committee, and general correspondence to Carol Pilch, carol.pilch@GD-CS.COM.

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Network*
Since January 1993

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SPIN Perspectives

This month's SPIN Perspectives column features summaries of the three Roundtable discussions conducted at our February meeting.

The following roundtable synopsis is contributed by David Heimann. David is on the Process Quality Assurance staff of Converse Network Systems and an at-large member of the Boston SPIN Steering Committee.

How to Participate in the Boston SPIN Steering Committee



Our roundtable participants discussed the various elected and non-elected committee positions of the Boston SPIN Steering Committee. These include:

Chair – Provides overall leadership. Presides at SPIN monthly meetings and committee meetings.

Vice Chair - Pinch-hits for the Chair, also currently has overall responsibility for programs.

Secretary - Maintains SPIN archives, compiles Steering Committee meeting minutes and action items.

Treasurer - Creates and monitors budget, income, and spending.

At Large - Along with the above officers, participates in the leadership of the Boston SPIN. Frequently assumes responsibility for additional items identified by the Chair.

Program Chair - Selects topics, finds speakers, and otherwise makes sure of a quality series of programs for the year.

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Newsletter Editor - Obtains articles for "In-the-SPIN" and compiles each edition of the newsletter.

Web Site Administrator - Oversees, maintains, and upgrades the Boston SPIN Web site.

Publicity Chair - Gets the word out about SPIN events to the world outside our membership.

Membership Chair - Maintains the mailing list, gets messages out to the membership, and promotes increase in membership.

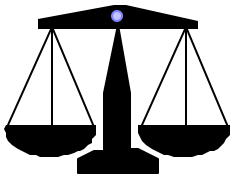
Roundtable Coordinator - Selects topics, finds facilitators, and otherwise establishes the roundtable program at each meeting.

In addition, all committee members periodically contribute articles to the "In-the-SPIN" newsletter.

Note: a participant in this roundtable volunteered to become Boston SPIN Program Chair for next year.

The following roundtable synopsis is contributed by Dolores McCarthy. Dolores is a Senior Process Engineer with CSC and is Secretary of the Boston SPIN.

Uniform Commercial Code 2B (UCITA) Comes to Town - How to Prevent Bad Software Laws



This roundtable was prompted by a news digest in the ACM Tech News of February 4, 2000 concerning the Uniform Computer Information Transactions Act (UCITA) and the controversy surrounding it.

At the roundtable, we had varying views and levels of knowledge about the UCITA bill, which we were eager to share. Handouts of articles from the Internet concerning the bill, both pro and con, were available at the table for discussion. We learned that the model UCITA bill was created by the National Conference of Commissioners on Uniform State Laws (NCCUSL), consisting of appointees from various states, who make legislative proposals for state legislatures to simplify interstate commerce. The best known is the Uniform Commercial Code. UCITA was developed to bring uniformity to the laws governing electronic and digital information in all fifty states.

However, from those of us at the table who already knew something about the bill and from perusal of the literature, it was apparent that the bill is very controversial. Business proponents of the bill (e.g., Digital Commerce Coalition and the Information Technology Association of America) have created favorable press releases that are impressive. Opponents of the bill in its current form, including professional organizations (ACM, IEEE, SEI, and ASQ Software division), libraries, 24 state attorneys general, the FTC, corporate software buyers, and consumer groups are very concerned about cuts to consumer and business customer rights.

As stated in the ACM Tech News brief, the proposed bill would allow software firms to remotely turn off programs in customers' systems if the customer was late on lease payments or other fees. In addition, the bill would give e-mail the weight of a formal legal notice without proof that the customer received the message. Software makers would be allowed to use nondisclosure clauses in software packages to prevent the publication of product reviews. Software sales would be considered licensing agreements, which would enable vendors to prohibit the future sale or donation of their products.

One person at the roundtable felt it was important not to regulate software providers any more than other industries and that sending legal notices by e-mail was equivalent to sending legal notices via the U.S. post office. Others felt there was significant evidence from the literature that consumers of software products should be concerned about the impact of the bill on their rights. There is a group coordinating the opposition, which any interested person or group may research and join at no cost, the 4cite coalition, www.4cite.org.

We learned that the NCCUSL approved the bill at its annual meeting in July 1999. The next step would be for each state legislature to vote on the bill to become law in their state. A few states have already passed the bill, but others have tabled it for future consideration, until they have more time to understand the ramifications. Some at the table felt that the bill would die a natural death because of such issues.

The allotted half-hour for the roundtable passed very quickly, leaving a feeling that we'd hardly dented the surface of the subject. Some felt the subject deserved a follow-up roundtable. For those who would like to learn more about the bill and form their own opinions about the issues surrounding it, there follows a list of Internet references to letters, articles, and press releases on both sides of the issues.

<http://www.2bguide.com/newsart.html>
<http://www.2bguide.com/whatsnew.html>
<http://www.nccusl.org/pressrel/Ucita.htm>
<http://www.2bguide.com/docs/899prdcc.html>
http://www.infoworld.com/cgi-bin/displayStory.pl?features/990531ucita_home.htm
<http://www.badsoftware.com/>
<http://www.badsoftware.com/sei.htm>
<http://www.4cite.org/UCTA101.html>
<http://www.ftc.gov/be/v990010.htm>
<http://www.law.upenn.edu/bll/ulc/ucita/citam99.htm>
<http://www.ieeeusa.org/FORUM/POLICY/1999/99july20.htm>
<http://www.arl.org/info/frn/copy/ucitapg.html>

Note: At the Boston SPIN April 1999 meeting, attorney Cem Kaner gave a talk on the subject "Uniform Commercial Code 2B (UCITA) Comes to Town - How to Prevent Bad Software Laws." Cem is one of the most outspoken opponents of the bill and his web-site is listed above.

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Software Subcontract Management



The scope of the roundtable discussion was based on the following definition of software subcontract management:

“The process for selecting software subcontractors, establishing commitments with the subcontractor, and tracking and reviewing the subcontractor’s performance and results.”

The software subcontract roundtable participants had different experiences with software subcontracts including:

- Subcontracting outside the organization
- Subcontracting within the organization
- Subcontracting to small companies or individuals
- An “off shore” software subcontractor
- A prime contractor tasked with developing a large system for a DOD customer that subcontracted development of some system components
- A project manager for a software subcontractor.

On selecting software subcontractors:

One roundtable participant selected subcontractors based on interviews, references and written proposals. The quality of the proposal tended to be a good indicator as to how the subcontractor would perform. The organization that provides a higher quality proposal has a higher probability that, if contracted, they will meet your expectations.

On tracking the subcontractor’s progress:

The roundtable participants seemed to be in agreement that the contract was the mechanism that would allow the appropriate level of monitoring and tracking to happen. The contractual agreement identifies milestones or checkpoints so that the prime contractor continues to get visibility into the subcontractor’s progress. Weekly and/or monthly status reports are frequently identified in the contract.

One of our roundtable participants identified the work breakdown structure or WBS as being a key mechanism for defining the milestones and tracking progress against the schedule. Another participant pointed out that there must be a clear contractual requirement for the result or expected outcome. Without such an agreement, failure is almost guaranteed.

Those who had experience subcontracting within the same organization agreed that this was more difficult because in this situation there is no contractual agreement.

On managing requirements changes after the subcontract is awarded:

Requirements change is not a problem when the contract is based on time and materials. Tasks are defined and contracted in small increments over the project life cycle. This allows for negotiation on an incremental basis as the product is further

understood and defined. In addition, task agreements are made based on prioritized features implemented within a set timeframe. This insures that the higher priority features will be completed and delivered as opposed to all features partially completed within a set timeframe.

On maintaining the subcontractor’s commitment to complete the project:

This is a situation where the subcontractor has either insufficient resources to dedicate to the project or has other, more interesting or important projects that require resources. Several participants indicated that they had experienced this situation. One of the software subcontractor participants said that this was not a problem since his organization has a large pool of resources available and that they have a defined process for knowledge transfer.

Meeting Summary

Notes from the February Meeting

Contributed by David Heimann, Comverse Network Systems

Topic: Using Quality to Drive Project Lifecycles

Speaker: Johanna Rothman, Rothman Consulting Group, Inc.



A number of software project lifecycles are practiced by software developers. These include waterfall, spiral, evolutionary prototyping, code-and-fix, etc. People often have various reasons for using one practice or another. However, the quality priorities of an organization, and especially its specific customers, can be effectively used to select an appropriate project lifecycle.

There are various project goals which quality efforts aim toward. Most frequently addressed are fast time-to-market, low defects, and rich feature design. A key decision a project or product manager must make, in order to provide an effective focus to a quality development effort, is the proper priorities of these goals. Different projects have different quality goal priorities, with much of these priorities depending on where in the market timeline their products are positioned. For example, a product in the early phase of its market would emphasize "time to market", whereas a product in the mainstream phase of its market would emphasize "low defects".

These priorities can be used to determine the project lifecycle to use. For example, if the priorities are Features, then Low Defects, then Time to Market, a waterfall approach is best.

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However, if the priorities are Time to Market, then Low Defects, then Features, an evolutionary prototyping approach is best.

The speaker gave several examples of this selection process in action (some of these were real, with the names changed to protect the guilty). Included were a time-to-market and a low-defect example, as well as two examples on arriving at beta-code and final-code release criteria.

The speaker's summary slide stated

- a) Quality is what customers value -- Low defects, Time to market, Feature set, etc.;
- b) Balance all aspects of quality for your project;
- c) Create release criteria, trading off each aspect of quality;
- d) Choose a project lifecycle to provide leverage for your project.

References for further information were also provided.

Note from the Editor: Johanna Rothman's papers are available free of charge at her company's web site. Several of the papers provide more detailed information related to her presentation: <http://www.jrothman.com>.

Information about Upcoming Meetings

by Johanna Rothman, Program Chair

March Meeting Announcement

Topic: Ensuring Clients Achieve Superior Value In the Digital Economy

Speaker: Jim Driscoll

When: THURSDAY, March 16, 2000, 5:30pm-8:30pm
 (Joint meeting with Boston section, ASQ)
 5:30 PM Socializing and Networking
 6:30 PM Dinner and announcements
 7:30 PM Jim Driscoll
 8:15-8:30 Questions and Answers

Cost: \$25.00 (Includes dinner and speaker)

Reservations: Call before March 13, 617-423-2772. If you intend to have dinner, please call 617-423-2772. Please do not RSVP for dinner if you are not planning to have dinner. If you intend to arrive at about 7:30pm just for the speaker, please email Johanna at jr@jrothman.com or call Johanna at 781-641-4046.

Who: Everyone (Academia, Government, Industry)

Location: Wyndham Garden Hotel, Burlington, MA

Abstract: E-commerce is changing the way we conduct business. That is why EDS is reinventing itself by changing its business model, restructuring, and aggressively cutting its cost structure. By the time this metamorphosis is complete, EDS will literally become a brand new organization. Everything

will change, except for one thing - the strategy for process improvement.

CMM based process improvement has long been recognized within EDS as the engine for increasing software developers' productivity, reducing software defects, and reducing time-to-market, which is the key to turn this vision into a reality.

This presentation will take you through EDS' journey in implementing quality improvement, the challenges faced, and the evolution of a global process improvement strategy, which is rapidly bringing about positive business impacts, and higher maturity levels, for both EDS and its clients.

About the Speaker: James R. Driscoll is division vice president for EDS' Wireless Division. Mr. Driscoll is responsible for planning, business development, and delivery of EDS offerings to wireless carriers in North America. Jim has held senior management positions in EDS, BRAE Corp., Bell Atlantic Mobile, and Apex.

Mr. Driscoll is a frequent presenter at industry forums. He received a BA in Mathematics from the University of Maine in 1975.

SPIN Roundtables: We will not have roundtables at the March meeting. Look for them to resume with the April meeting.

Directions: Directions to the Wyndham Garden Hotel in Burlington: From Route 128 in Burlington, take exit 32B and turn east, onto Middlesex Turnpike. Take the first left turn onto Wheeler Rd. The Wyndham Garden is your second driveway, 30 Wheeler Road.

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

Cancellations (including weather cancellations): We will notify the membership via email to the SPIN distribution list, post the notice on the SPIN web page, and send the cancellation announcement to Channel 7 TV and radio, WRKO AM 680 starting at 3pm.

SPIN '99-'00 Program and Speaker Schedule

| Date | Speaker/Topic |
|-------------------------------------|--|
| Apr. 18, 2000 @ General Dynamics | Dolores McCarthy, Carol Pilch, Barry Foster Panel: "Process Maturity: Things that Work" Moderator: Donna Johnson |
| May 16, 2000 @ General Dynamics | Paul Lanzoni "Technology Planning and Decision Making" |
| June 20, 2000 @ General Dynamics | Steve Rakitin "Yellow Sticky Method of Project Scheduling" |

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 Criteria:

1. The topic must be timely, an issue of concern to our membership.
2. We want to hear about real-world topics. If you have an academic topic, we're interested in how it applies to the real world.
3. If you are interested in creating a panel, please write an abstract, and suggest at least one panelist. We can work with you to find other panelists.
4. The topic should either explain how to *do* something, or bend our brains in another direction.
5. The presenter should be intimately involved with the "hows" of the thing that got done.
6. We are not interested in sales pitches.

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.

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, and picture 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 desired: Send a copy of overheads, paper, etc. for our web page as of the day of the meeting. If possible, provide 50-60 copies of overheads at the SPIN meeting. (The attendees really appreciate this.)
5. Optional: If you've written a book and are willing to donate it to SPIN, we'd be happy to offer the book as a door prize by conducting a free drawing.



Feature Article

This month's feature article is contributed by Jack Hillman. Jack is IT Process Manager with Amica Mutual Insurance Company in Lincoln, Rhode Island.

Just Enough Process!

"Software process in the 21st century will best be described by two words: just enough."

Dr. Dwayne Phillips, 1999

I recently read two intriguing articles on the subject of "just enough" process in the September 1999 issue of the Cutter IT Journal. I have attempted to summarize below, the points made by Dr. Dwayne Phillips and Dr. Anthony Wasserman in their thought provoking articles that give a glimpse into our futures. If you also become intrigued, please take a look at the text of their full articles that are footnoted at the end of this column.

Mentioning of the "P" word may be like stepping on a political landmine, but *process* will live on. As Dr. Phillips states "process is *how* people *do* things. People will continue to follow processes in the next century, and they will need to know what to do, when to do it, and how to do it."

Dr Phillip's opinion is that the proponents of process will survive and grow in influence in the 21st century, however, "the minimal process followers will also survive in the next century." Dr. Wasserman observes that "many companies view time to market as their overriding concern and avoid many software engineering practices which they fear will slow down their development process. Projects that concentrate on getting to market quickly will use processes that speed delivery." These best practices will cut whatever they can for short-term gain. This "just enough principle" will allow companies writing commercial software to do just what they need to do to get to market. Dr. Phillips adds, "Success on a few projects will convince them "That is the only way to do it." These people will become experts at a specific, minimal process that optimizes time to market. They will know nothing else about process. If you know how to get to market quickly, these people will listen to you just long enough for you to show them how to do it." Looking ahead, companies will have to strike a balance between formalized development processes and rapid product delivery. Dr. Wasserman identifies two types of process that are likely to be dominant in the near future:

- A controlled development process in which an organization makes an ongoing effort to improve processes to build high quality systems and
- A rapid development process in which an organization emphasizes frequent releases of its software products

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The future....

“The future of process is bright for everyone who is ready. Process, even *big* process, will still exist. The *just enough* principle tells us that how and when people learn about process will be different. Everyone needs to understand what this means and act accordingly. Project managers will be at the center of this activity. They are responsible for the people on their projects knowing what they need to know”, predicts Dr. Phillips. Project Managers will have numerous writers, consultants, process professionals and speakers anxious to give them advice.

Dr. Phillip’s states that “one challenge will be dealing with the just-in-time buzzwords that abound. People catch buzzwords like RAD, JAD, prototypes, spirals, user-centered, object-oriented, 4GL, etc. Then someone decides that one buzzword will be the *just enough* answer to their next problem, whatever their next problem might be. We must become familiar with the buzzwords, what they mean in general, and how and when they apply. Each buzzword is based on an idea that works in its place. For example, prototypes are great when trying to understand what a user really wants. Therefore, they are a requirements gathering technique, not a design method.”

Because concise presentation is always difficult and because instructions should always provide background, packaging process information in a user-friendly format will be the biggest challenge. “It is hard to boil down a full process into a script”, Dr. Phillips observes, “That requires thought, experience, drafting scripts, trying them with people, changes, changes, and more changes. Few of us have the skill and patience for that. Regardless of the difficulty of this, it is the key to thriving in the 21st century. Process users in the next century will not dig through process manuals for the information they need for their project. They will, however, listen if they see that you know something they need and can show it to them now. Any process mentor who can do this will have more work than he or she can possibly handle.”

Process in the 21st century and the just enough principle will be hard for some people to accept, but the 21st century audience is different and wants the message packaged in a different manner. “The next-century programmers are using a different principle, the *just enough* principle. They just want just enough to do their job today. Tomorrow is far away, its problem will probably be different, and they will deal with that when it happens”, states Phillips. Process mentors communicate, and the first rule of communicating is to know your audience. A good communicator will adjust and may even have fun doing it.

Dr. Phillip’s conclusion is that “some of the 21st century audience may surprise us. There will be some that will soak up just enough knowledge and then search for more. They will dig, learn the general principles, see how to apply them to different situations, and become process mentors themselves. After all, someone will need to carry on when we 20th century dinosaurs retire!”

REFERENCES 1. Phillips, Dwayne. "Show me how to do that: "Just Enough" Software Process for the 21st Century" *Cutter IT*

Journal, Vol. XII, No. 9, 6 pages, (September 1999). 2. Wasserman, Anthony. “Software Process and Software Professionals in the 21st Century” *Cutter IT Journal*. Vol. XII, No. 9, 10 pages, (September 1999).

Boston SPIN

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. There is no charge to attend the meetings.

For more information about our programs and events contact:

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Hanscom AFB, MA 01731-2100
Telephone: (781) 377-8324
Email: ryan@sei.cmu.edu

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

Dawna Baird of SEI (412) 268-5539, dbaird@sei.cmu.edu, <http://www.sei.cmu.edu/collaborating/spins/spins.start.html>.

IN THE SPIN is available on our Web page:

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

TO RECEIVE NOTIFICATION OF NEW IN-THE-SPIN ISSUES and Boston SPIN specific notices 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.

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

Send letters-to-the-editor and general correspondence to Carol Pilch, carol.pilch@GD-CS.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/>