

In-the-SPIN

Newsletter of the Boston  **SPIN**

Issue 37 Summer 2000

Editor: Carol Pilch

Editorial

This issue of *In-the-SPIN* provides you with summaries of the May and June meetings. Also in this issue, you will find synopses of the three roundtable discussions that were conducted at our June meeting. The focus of the June meeting was on schedules – realistic and unrealistic.

The SPIN Perspectives column in this issue is contributed by Johanna Rothman. Johanna, a regular contributor to *In-the-SPIN* offers advice to managers on how to handle a workplace problem in a straightforward way.

For those of you who missed the June meeting and the election of SPIN Steering Committee members for the 2000-1 SPIN year, here are the current Steering Committee members:

Chair	Linda McInnis
Vice-Chair	Barbara Purchia
Secretary	Dolores McCarthy
Treasurer	Ron Kay
At-Large	Rick Brenner, David Heimann.

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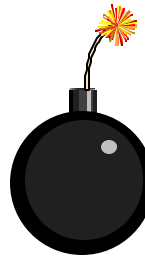
We thank the Computer Science department of **UMASS- Lowell** for providing support and hosting our Web page

SPIN Perspectives

This edition's SPIN Perspective is contributed by Johanna Rothman. Johanna is president of Rothman Consulting, Inc. and is a regular contributor to In-the-SPIN.

Improving Management Processes: Learn to Speak the Unspeakable

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I recently had lunch with my colleague, Glenn. Before I even sat down, he said, "JR, you're not going to believe what happened at work this morning. People have been leaving our place in droves, and they're sending mail to the all-engineering list, or the all-Massachusetts list, telling the rest of us they're leaving. That's not so bad, but some people are replying to them, including the all-list on their reply, telling them how exciting their new opportunity is, and how they wish they were leaving with the exiting employee.

"Our CEO is furious about this. He doesn't like seeing the going-away notes, but he really hates seeing the I-wish-I-were-going-too notes. He made this a Director-level problem, and dumped it in my lap. In this morning's acrimonious meeting, the other directors and I decided that only managers should be allowed to post to the "all" lists. I hate this solution, but it's the best one we could come up with. Why can't we just take the CEO off the lists?"

We both thought this solution was a bit strange. After all, Glenn's company had created the "all" lists to communicate

Continued on next page

IN THIS ISSUE . . .

Editorial.....	1
SPIN Perspectives	1
Meeting Summaries	2
Roundtable Reports	4
Boston SPIN.....	6

easily with the different groups. Making the "all" lists management-only broadcast lists considerably reduces their value.

I asked Glenn why his management and peers chose to hide the initial real problem. Glenn was initially confused, "What do you mean, the real problem?" The real problem was that the company's management, especially the CEO, wasn't speaking about or addressing the attrition problem.

Many organizations have things they can't or won't talk about. When a management team can't talk about a problem (attrition), just one of the consequences of that problem (here, inappropriate email) creates different and bigger problems for the other people (here, director-level managers).

A side effect of "we can't talk about that" creates a new feeling of being marginalized and insulted. Glenn's peers may have been thinking, "Not only is this a terrible place to work, but the best idea our management has is to blame us for talking about it. Everybody has problems, but our management won't face theirs."

It's difficult to speak about some things. Some managers feel as if attrition is a failure on their part, which makes attrition particularly hard to discuss. Managers have many different responses to employees leaving:

- Do you get the sinking feeling that you've done something wrong? One of my colleagues bemoans everyone leaving: "If I'd been a better manager, maybe my employee wouldn't leave."
- You might be sad, because you enjoyed working with the employee. It makes sense for her career or her life to leave, but you're disappointed.
- Maybe you're happy the employee is leaving, because you won't have to address the performance problems you've been avoiding. You know you should have addressed those issues, and now you feel just a little guilty about feeling happy that you're off the hook!

Glenn's CEO probably realizes that something about the company is not right, but he's not ready to discuss what that is. But, if you don't face the problem, you can't solve it. Unspeakable problems have enormous power over you. They can make you do things that you couldn't imagine in other situations. The "all" lists here are an example of letting an original problem (attrition) causing other problems: misuse of the mailing lists, getting the wrong people involved in creating a fix to a problem that doesn't exist, and ignoring the real problem.

When you come up against unspeakable problems, articulate the problem. Just saying it out loud loosens the problem's power over you. Imagine if Glenn's CEO could say, "We're having a problem with people leaving. Why do you think that is?" The other managers could then talk about the state of the company with the CEO. They might not be able to solve the

problem quickly, but no one can solve problems they can't discuss.

Learn to speak the unspeakable, and regain your power over your problems.

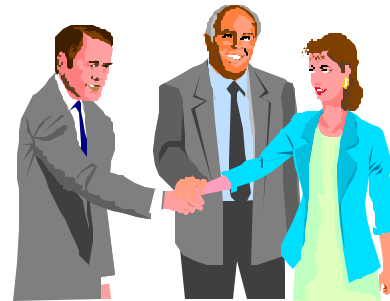
Meeting Summaries

Notes from the May Meeting

Contributed by Dolores McCarthy, Senior Process Engineer, Computer Sciences Corporation and Boston SPIN Secretary

Topic: Dynamic Business Planning

Speaker: John Satta, Quality Systems and Software (QSS)



John Satta of Quality Systems and Software (QSS) spoke on the subject, "Dynamic Business Planning." John emphasized the importance of responding quickly to rapidly changing markets and technologies as an imperative for business survival. Strategic planning is now out of favor because it occurs only once a year. Traditional strategic management works with isolated teams and independent tools, and has limited visibility into results. Business objectives are not linked to strategic initiatives. Now we must pay attention to and include the customer. Planning must be continual, not periodic, as we need to manage uncertainties in a changing environment and keep stakeholders - customers, suppliers, employees - involved with strategic decisions. Planning must be integrated by thinking globally as a multi-enterprise collaboration, with visibility into customers' and suppliers' needs and expectations, and awareness of the competition.

We need to ensure plans and actions are in tune with reality by keeping the lines of communication - input and feedback - open with all stakeholders. This will provide critical knowledge of our key technologies, major interdependencies, core strengths, and critical weaknesses. Then business objectives will connect to realistic and timely opportunities and goals, thus increasing the opportunities for the business to prosper.

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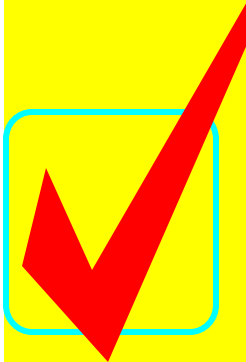
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Notes from the June Meeting

Contributed by Carol Pilch, Senior Member of Technical Staff and SEI Authorized Lead Assessor, General Dynamics Communication Systems

Topic: Accurate Estimating and Scheduling Using the Yellow Sticky Method

Speaker: Steven R. Rakitin, Software Quality Consulting



Steven Rakitin, the featured speaker at the June SPIN meeting, provided those of us in attendance with a method for estimating and building project schedules by “going forwards.” Many project schedules are built by “going backwards” or fitting a schedule to a predetermined end date. The speaker observed that when projects are “scheduled backwards” they are almost always late. In fact, “scheduling backwards” has a negative impact on project morale, product quality, and productivity.

The yellow sticky method starts with a complete set of software requirements, a Software Requirements Specification or SRS. Also, marketing group requirements are identified and grouped into the “must haves” and “wants.” Marketing must understand that the commitment is to deliver ONLY the “must haves” NOT the “wants.”

An important element of the yellow sticky method is getting buy-in to the schedule from the organization doing the work before making commitments to the customer. A clear and consistent message with respect to commitments is sent to the customer. The bar should be set low enough so that you can consistently beat it. In this way you set a low expectation but you succeed in meeting commitments.

The yellow sticky method employs a team approach. All team members are represented directly or indirectly: software development, software QA, documentation, training, etc. Each person estimates how long it would take to complete their tasks. Tasks are from 1-5 days duration. Any tasks over 5 days are decomposed to sub-tasks. Peers critique task estimates.

To actually build the schedule, a large chart is placed on the wall. The project team works together and places their tasks on the chart at the time the task should start. Team members give instant peer review of each other’s estimates. The result is an accurate, realistic schedule that everyone has bought into, not a force-fit schedule.

Overall benefits derived from using the yellow sticky method are:

- Scheduling forwards results in more accurate, realistic schedules that can actually be met
- Worst case, you will deliver exactly what was promised; Best case, you will deliver more
- People will work harder to achieve a schedule that they set for themselves
- Scheduling forwards helps your development process become more predictable.

Information about Upcoming Meetings

by Anna Allison, Program Chair

September Meeting Announcement

Topic: The Future through the Past: Using Post Mortems for Process Improvement

Speaker: Linda McInnis, Noble Associates, Inc., Acton, MA

When: Tuesday, September 19, 2000. 6:30pm-8:30pm
6:30-7:00 Networking and Round Tables
7:00-7:10 Announcements
7:10-8:10 Linda McInnis: Noble Associates, Inc.
8:10-8:30 Questions and Answers

Who: Everyone (Academia, Government, Industry)

Location: General Dynamics, 77 "A" St., Needham MA.

Abstract: This talk teaches you how to implement significant process change in fast paced development environments (e-commerce, web, pharmaceuticals) using post-mortem data with simple analysis techniques to pinpoint areas of improvement and create do-able and measurable action plans. Examples drawn from several companies including Millennium Pharmaceuticals, FTP, Lotus Development, AT&T where software was shipped, tested and documented in as little as 3 months.

About the Speaker: Linda McInnis is a Vice President of Engineering for Noble Associates, Inc. In this capacity, Ms. McInnis builds departments for client companies that do Quality Assurance, Technical Documentation, Release Engineering, Data Operations and Y2K. She has twenty years of industry experience in these areas both as a consultant, individual and managerial contributor. She is the author of several Software Development Process models and written over 100 technical manuals, white papers, and organizational, process and marketing documents.

Ms. McInnis holds a B.S. in Physics from Worcester Polytechnic Institute and has pursued graduate study in Electrical Engineering at Stanford University. She is currently listed in Who's Who in the East and Who's Who of Business Leaders and is a member of the ACM and IEEE societies. Ms. McInnis also won Best Paper Award at SM/ASM2000 for her paper Relentless Application Development. She was elected Chair for the Boston SPIN (Software Process Improvement Network) for the 2000-2001 season.

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SPIN Roundtables: Roundtables are focused group or "birds-of-a-feather" discussions, with a facilitator, to stimulate and moderate discussion. Roundtables are held during the Networking portion of the SPIN meeting. See our web page, <http://www.cs.uml.edu/Boston-SPIN> to see which topics are selected for this SPIN meeting.

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. General Dynamics is the last building on the right. Enter the parking lot by the General Dynamics 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. See <http://www.gd-cs.com/needham.html> for directions.

Info: See our web page, <http://www.cs.uml.edu/Boston-SPIN> For SPIN info, contact Anna Allison, anna_allison@yahoo.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.

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 Anna Allison, anna_allison@yahoo.com

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 anna_allison@yahoo.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.

Roundtable Reports

This *In-the-SPIN* column features summaries of the three Roundtable discussions conducted at our June meeting.

The following synopsis is contributed by Dolores McCarthy. Dolores is a Senior Process Engineer with Computer Sciences Corporation and Boston SPIN Secretary.

Top 10 Schedule Risks

This roundtable was ready to go at the starting bell with plenty of thoughts about what can go awry with a project and cause it to miss its completion date. The group identified 10 risks very quickly and went on to capture a total of 22 before the allotted time for the roundtable was up. The list follows:

1. Sales/Marketing - promising more than can be realistically delivered by the need date
2. No plan at all for the project
3. No basis for schedule estimates
4. Ill-defined requirements or scope creep cause more work than planned
5. Shortened deadline in the middle of the project
6. Failure to follow a defined process
7. Changing legislation causes unexpected rework or new work
8. No training in scheduling

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9. Underestimation of required resources - skills, tools, development environment
10. Absence of pre-existing metrics to justify the schedule
11. Right role-wrong person - need doesn't match skill, so productivity suffers
12. Dictator, not a leader, discourages team
13. The wrong assumptions are made
14. Failure to inspect and improve plan before starting
15. Absence of testing - defects left in - product must be corrected
16. Bad or no communication within the project
17. Management incentive conflicts - bottom line or good product
18. Production problems take resources away from planned work
19. Late QA involvement causes rework
20. Company mergers - change in priorities of management can disrupt a project
21. Budgets inadequate to support the schedule
22. Inability to say "No" - try to satisfy more customer requests without adding time to schedule.

As the list of risks grew, the group began to feel a bit depressed at how easy it was to name them. Some suggested that next time they would like to focus on what could go right with a project. Others heartily agreed.

The following synopsis is contributed by Johanna Rothman. Johanna is president of Rothman Consulting, Inc. and is a regular contributor to In-the-SPIN.

Adhering to Project Schedules and Plans

We were planning to start the roundtable at 6:30pm, but due to the traffic on 128, we encountered a problem common to software projects: the project started out adhering to the plan and schedule, and then quickly became off-plan and off-schedule.

Some common times when people recognized their projects could no longer adhere to the plans and schedules:

- When High level design is complete. Detailed design takes longer than expected.
- Once functional spec becomes design
- When project starts slipping a week every week
- When a key employee leaves a project

We didn't get a chance to discuss causes.

We then discussed some tactics for managing some problems of project schedules.

Problem 1: How to avoid slipping a week every week.

- Have something in the release someone else wants. Stops the increase in requirements, and someone else has an incentive for your project to complete.
- Rapid descoping: start taking features and functionality out of the project.

Problem 2: How to manage schedules

- Iterate on planning the work between the milestones. (Plan the first phase of work and all the milestones, then plan the next phase as you're in the previous phase. Don't try to plan the whole thing at once.)
- Use inch-pebbles (miniature milestones), 1-2 day tasks, for scheduling
- Institute a daily build and smoke test. The person who breaks the build fixes it.

Problem 3: How to put large (long time duration) features into a release

- Use an incremental lifecycle. Start with "how little can we put into this release?"

Problem 4: How to start planning

- Prioritize the features and requirements
- Who are the major stakeholders? What do they want?
- What are the constraints?
- After prioritizing the work, start small
- Know your customer and what they want

Problem 5: When the schedule is hopeless

- Negotiate with the stakeholders
- It's generally not a surprise to anyone working on the project. The real question is how do you speak about the unspeakable things?

*The following synopsis is contributed by Carol Pilch. Carol is an **and SEI Authorized Lead Assessor** and **Senior Member of Technical Staff with General Dynamics Communication Systems.***

Root Causes of Overly Optimistic Schedules

Our roundtable members participated in a methodical root cause analysis using a cause and effect diagram. We hoped to get some answers to the questions: How do projects end up with overly optimistic schedules? What are the realities of planning schedules that more often than not miss the mark?

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The round table participants agree to explore four major cause categories: people, management, process and equipment/tools. Although we could not explore all of these categories and subcategories to their root causes during the session, here is a snapshot of our results.

People

- Lack of skill/training in planning schedules
- Lack of experience in the planned environment
- Innate desire to please

Management

- Do not involve the people who will do the work in the planning/scheduling process
- Mandates the end date
 - Makes premature commitments
 - Responds to client demands

Process

- Lack of defined planning/scheduling process
- Inadequate planning/scheduling process
 - Too high level/lacking detail
 - No consideration for contingencies (slack)
- Lack of historical data
- Inadequate historical data

Equipment/tools

- Lack of modeling tools
- Lack of scheduling tools
- Lack of training in use of available tools.

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:

Charlie Ryan
ESC/DIJ (Building 1624, Room 2NE15)
5 Eglin Street
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 withall@mediaone.net.

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/>