In-the-SPIN

Newsletter of the Boston SPIN

Issue 33, January, 2000

Editor: Carol Pilch

Editorial

For the first issue of what's been labeled as "the new millennium," we have contributions from SPIN members as well as from our SPIN steering committee members. SPIN member Judi Brodman provides an interesting project management – sports analogy in a special feature column, "Dear SPIN Doctor." After reading this column you will probably reflect on the state of leadership on your project and if you're in a position of leadership, you may seriously consider implementing the SPIN Doctor's advice to motivate your team to achieve greatness.

This month's SPIN Perspectives column provided by Barbara Purchia, Chair of the SPIN Steering Committee, takes a look at "looking back" to "move forward" or recording your project's history, sometimes called lessons learned. Also in this issue, SPIN member, Harry Joiner, has captured the essence of the roundtable session conducted at the December Meeting. Johanna Rothman, SPIN Program Chair, provides us with information about future meetings.

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.

Boston SPIN
Since January 1993

Software Process Improvement Network

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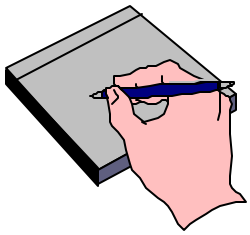
SPIN Perspectives

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.

Post Project Reviews or Why Looking Back Can Help You Move Forward

No matter what you call them:



- Post Project Review
- Project Summary
- Project Legacy
- Project Retrospective
- Post Mortem
- Postpartum,

looking back at completed projects is a great way to improve your future. The post project review should always be viewed as an improvement tool and **NOT** a record of failures. A brief, concise summary of the project should be captured, documented, distributed, and posted. This information can include:

- Project overview - what was stated and what actually was delivered
- Planned and actual milestones
- Any metrics information
- What went well
- What didn't go well
- Technical lessons learned
- Managerial lessons learned
- Recommendations for future projects

Continued on next page

IN THIS ISSUE . . .

I have used several mechanisms for capturing this information and have found that a team meeting is an effective vehicle for gathering what went well, what didn't go well, and recommendations for future projects. It also is a good project closure mechanism. We use the meeting as a tool for reviewing and analyzing project successes and also what could have been done better. We also promote discussion on improvements for the next or similar project. This meeting does **NOT** assign blame to any individual or group and it does **NOT** provide an exhaustive study of the project. We usually have a person facilitating the meeting. The facilitator provides meeting groundrules and keeps participants on track.

The meeting is split into two main parts, looking backwards to gather what went well and issues and looking forwards to prioritize issues and to brainstorm on the top 3 issues. We usually do this in a 2-hour period and it can be very exhausting (for both the team and the facilitator)! However, the results are worth the effort.

The deliverables from the meeting are a list of the issues and recommendations brought up at the meeting. This information should be a significant part of a Post Project Review Document. Information related to metrics and lessons learned should be gathered and input into the document to produce a more comprehensive and historical record of the project. This information really does help when you are looking to plan your next project. It can help answer questions such as

- How accurate were we at estimating? Should we modify our estimating procedure?
- How many issues were discovered during the development of the project? How can we improve this?
- Did requirements change frequently during the course of development? How can we prevent this or reduce the impact?

We have found that Post Project Reviews are also valuable organizationally. Sometimes multiple groups encounter similar issues and they can share their experiences and solutions.

Post Project Reviews allow project groups to profit from past successes and learn from past mistakes. Reading Post Project Review Documents can also help newcomers get up to speed more quickly too. It is a critical component of effective project management and should never be forgotten, overlooked, or ignored.

So before you go running off to your next project, take some time to capture the learning that occurred on the project that has just finished. Your efforts to reflect on and document lessons learned may not only help you reduce time on your next project but, by sharing your learning with your fellow project managers, you might be helping them save time on their projects as well.

Meeting Summary

Notes from the December Meeting

Contributed by Harry Joiner, SRC/Titan Corporation

Topic: SQA in Small Organizations, a Boston SPIN Roundtable Discussion

Roundtable Facilitator: Harry Joiner

The December roundtable was the second installment on this subject as this topic was the subject of a November roundtable. We began with introductions and the presentation of a scenario regarding a small software development organization. The initial discussion centered around two questions:

- How do we know there is a quality problem?
- How do we convince management to take action in the area of quality?

Several factors could indicate a quality problem, most of these factors represent some form of "pain" being experienced:

1. Customer complaints
2. Time spent on the phone with the customer
3. Complaints by the developers
4. High turnover rate for the staff
5. High defect rate
6. Late deliveries
7. Significant rework required
8. Loss of follow-on work to other development organizations
9. Cost/benefit analysis

One of the difficulties of operating without adequate SQA focus is the lack of information to document the problems listed above. In many cases, the "pain" goes unrecognized since no data is collected and the experience is dismissed with the excuse, "That is the way software projects always go." Without documentation, it is very difficult (many would say impossible) to convince management to take any action.

Two specific recommendations regarding SQA activities in small organizations came out of the discussion. The first was to hire part time help to perform the SQA activities. If the project is part of a larger organization, perhaps this SQA person could handle several projects and be occupied on a full time basis. One of the participants was concerned about SQA for a subcontractor with only one or two employees.

The second suggestion was that peer reviews (or the "buddy system") be used, particularly for changes to the code made during testing. By having a colleague check the work, you

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can greatly diminish the number of errors that get through to testing. Ideally, a system should be set up so that each developer works with several different people as the reviewers, reducing any personality issues and providing varied insight.

The discussion then focused on some strategic issues related to the questions of marketing/work lost to competitors. If an organization is losing business faster than it is gaining new customers and projects, then it should address the reasons in an honest and objective way. The concern is the natural tendency to blame outside factors (political decisions, funding problems, etc.) for the losses and to avoid looking for internal factors, such as product quality and consistency of performance, that may have a significant impact on the long-term results of the business. There are, obviously, a multitude of factors related to loss of business, but the discussion centered on the following ones that have to do with internal changes that may need to be addressed:

1. Is the quality of the product an issue? Are the customers happy with what they get? How many phone calls are received after delivery?

2. Is the quality of the process an issue? Are the products being delivered at minimal cost and schedule? Is time to market/customer a problem?

3. Are you building the right thing? Do you understand the requirements? Do you know your market well?

4. What are you good at? Are you building on your strengths? Do you have the right capabilities for the business?

Boston SPIN Calendar

Information about Upcoming Meetings

by Johanna Rothman, Program Chair

January Meeting Announcement

Topic: How to Estimate Software Size Using Requirements Sizing

Speaker: John Abbott, Consultant

When: Tuesday, January 18, 2000. 6:30pm-8:30pm
6:30-7:00 Networking and Round Tables
7:00-7:10 Announcements
7:10-8:10 John Abbott
8:10-8:30 Questions and Answers

Who: Everyone (Academia, Government, Industry), no charge

Abstract:
It's hard enough in most situations to define a project's requirements, never mind estimate the product size. Some projects have been successful estimating size with lines of code, function points, or testable requirements. But, many more projects still struggle with both the concept and the practice of size estimating.

John will discuss requirements sizing within a project context: the relationship between requirements size and total effort, using requirements size to track project progress, dealing with requirements added by the customer during the project, and other requirements issues. Attendees will get first-hand experience of this technique by participating in a simulated requirements sizing session.

About the Speaker:
John J. Abbott is an independent consultant. He was most recently Director of Software Process Improvement at John Hancock. He has 20 years of experience in software development organizations, including more than 10 years doing process improvement. He has led several ISO 9001 and SEI CMM® based process improvement initiatives. He has published a number of articles and presented at several conferences, including the 1997 SEPG and the 1999 Conference on Software Quality. John is the author of "UNIX for Commercial Use."

About 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.

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

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.

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
as of 12/08/99

Date	Speaker/Topic
Feb. 15, 2000 @ General Dynamics	Johanna Rothman "Using Quality to Drive Project Lifecycles"
Mar. 16, 2000 Joint meeting with ASQ	Jim Driscoll "Ensuring Clients Achieve Superior Value in the Digital Economy"
Apr. 18, 2000 @ General Dynamics	Dolores McCarthy, Carol Pilch, 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	TBD

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 free drawing.

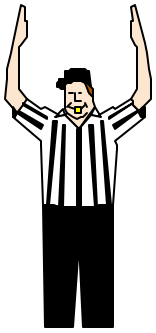
Dear SPIN Doctor

The "Dear SPIN Doctor column is contributed by the SPIN Doctor, Judi Brodman.

This column is for you; let's make a difference! Send your comments and questions to "Dear SPIN Doctor" at brodman@LOGOS-Intl.com or directly to the Editor. Sign them or use a "pen-name" -- I respect your confidentiality.

Leadership's the Key

Dear SPINners:



The week before Christmas, an interesting editorial by Joan Vennochi, titled "On football field and in politics, leadership's the key", appeared on the Boston Globe editorial page. In that column, Ms. Vennochi discussed a number of football and political figures whom she felt possessed or did not possess leadership qualities. The atrocious showing of the New England Patriots on the previous Sunday as well as the political debates occurring in New Hampshire during the previous two weeks inspired her column. Her opening question was an interesting one - "Why does one group of athletes or workers rally and pull together to achieve greatness and another give up?" The answer, she says, "involves that elusive quality we call leadership".

The column went on to discuss why the "jock crowd" thinks that Pete Carroll (now ex-Patriot's coach) is not a leader - "too nice", "too California", "too mellow" - "not manly enough". Do these comments mean that "nice guys" will never be leaders and that "tough guys" will always be leaders? She provides a further example (Bill Parcells) of how fear inspires people to excel and nastiness motivates. She continues by saying that fear works only when you can "scare them (players) into being the best they can be" and nastiness works only when you can "make a player confront his weakness in order to build upon his strengths and then work not just for individual glory but for the glory of the team". The ability to motivate, however the motivation is accomplished, appears to be a key factor in the leadership quality.

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Ms. Vennochi goes on further to say that leadership is, therefore, the ability to "make players (people) believe they can win, to inspire them to try and to care if they don't" - it is "a know-it-when-you-see-it kind of thing" - an ability, she says, that Pete Carroll lacks, that Senator John McCain exudes, that President Clinton lost. She adds that leaders are those who others listen to "when they speak and instinctively follow" where others "yell, scream, rant and rage. But no one will ever follow them anywhere because they know there is nothing behind the noise… You cannot lead without a plan people consider worth following." And when you fail as a leader, "…it's over. Voters won't vote for you. Employees won't work for you. Football players won't play for you. You just can't get anywhere, because no one understands where you want to go or how to get there."

Although Ms. Vennochi discusses why the leadership quality is important, she doesn't detail what the leadership quality is. So let's continue with the football example for a minute. Just imagine the Jets going out to play a Sunday game with no preparation. The players take the field with no game plan, no understanding of what plays to execute or what their roles and responsibilities are during the game - what they are expected to accomplish. They haven't trained for the game. The game begins. Each player stands around deciding what it is he will do today on the field. The quarterback gets the ball, looks up and sees players running every which way, standing around, and running towards him. Whack - the quarterback hits the ground quickly under a flurry of opponents. He's hurt - what does the team do? Who knows - no one ever thought about what to do if someone gets hurt - a contingency plan? At one point in the game, the coach calls a team timeout and asks the team - "How are we doing?" "Great", the team members say, "we'll let you know more as we get near the end of the 4th quarter."

It's really ludicrous to think about a football game being played that way, isn't it? No coach would last very long if that was the way he approached a game. Coaches, like Parcells who are considered leaders or great coaches, plan for each game, train and inform their teams on what to expect and what they expect from team members, track work on the field and make adjustments if a player is hurt or not pulling his weight and they win. They motivate their teams to win, to play at the top of their ability, game after game. Parcells stated, in a press conference, that his personal goal is to win each football game the Jets play. As I said above, he attempts to achieve his goal of winning each game with a well trained team to perform the work, a game plan based on scouting reports and previous game films, risk identification, assessment and contingency planning to accommodate for plays that don't work, players getting hurt, etc., and indicators used to inform him how well the game is going and the team is doing (the score, the number of interceptions and sacks, yardage gained).

I find the similarities between playing football and developing software to be uncanny - planning based on past history, risk assessment, measuring progress and taking corrective actions. It is mind boggling to think of how much time and effort goes into preparing for every football game. Yet, when we start a software project, we act just like the football team example I described earlier - no game plan, team members not knowing what is expected of them or when, no way of measuring progress, no risk identification, assessment or contingency planning. We find it ludicrous to think about a football game being played with such little preparation, but not a software project being 'played' with little preparation. As software professionals and project "leaders", isn't our goal the same as Coach Parcells - to successfully finish every project - to win every game we play?

Remember the opening question and answer in Ms. Vennochi's column, "Why does one group of athletes or workers rally and pull together to achieve greatness and another give up?" The answer, she says, "involves that elusive quality we call leadership". Let's show a bit more of the leadership quality on our software projects and motivate more teams to achieve greatness by giving them a game plan to follow.

Happy New Millennium to you all!

the SPIN doctor

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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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/