Project Retrospectives

A kinder, gentler, more productive way to learn from past mistakes

Software Quality Consulting Inc.

Steven R. Rakitin
President

- Consulting
- Training
- Auditing

Phone: 508.529.4282
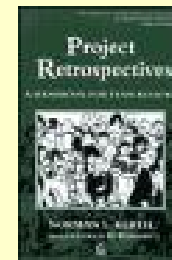**Fax:** 508.529.7799

www.swqual.com
info@swqual.com

Topics

- **Typical Post-mortem**

- **Project Retrospectives are Different**
  - **Planning and conducting a retrospective**
  - **Words of Wisdom…**

- **Summary**

Norman Kerth

Typical Post-mortem...

- **Post-mortems often fail because they:**

    - **occur with no planning and little preparation**

    - **are viewed as forums for exacting retribution and venting frustration**

    - **are led by a someone who may not have good meeting facilitation skills**

    - **may take only an hour or two at most**

    - **often result in no changes to behavior...**

- **As a result, ROI is very low since little is learned and nothing changes**

What Can We Learn?

If you always do what you've always done you'll always get what you've always gotten

Project Retrospectives Are Different…

- **Project Retrospectives are events not meetings**

- **Some key attributes:**
    - **They are planned…**
    - **Everyone comes prepared…**
    - **Trained facilitator plans events and leads discussions…**
    - **Focus is on acquiring "wisdom"…**
    - **Typically held off-site and take about 2 days (yes, days)**

- **By making an investment to learn from past mistakes, organizations can reduce likelihood they will repeat same mistakes on next project**

Wisdom

- **What is wisdom?**

  - **accumulated knowledge**

  - **trait of utilizing knowledge and experience with common sense and insight**

  - **ability to apply knowledge, experience or understanding with common sense and insight**

- **What group of people do we often associate with wisdom?**

- **How do people acquire wisdom?**

Source: WordNet ® 2.0, © 2003 Princeton University

Business Motivation

- **Why spend time on Project Retrospectives?**

    - **"It is much easier to identify another's foolishness than to recognize one's own."**

    - **When project teams work together, they learn stuff**

    - **Some stuff is not important and some stuff is very important**

    - **Important stuff has potential to become "wisdom"**

    - **Acquiring wisdom often comes directly from experiences whether good or bad…**

    - **End of a project is best time to openly discuss what happened in order to acquire wisdom…**

    - **We don't want to make same mistakes again…**

Kerth, N. L., Project Retrospectives – A Handbook for Team Reviews, Dorset House, 2001.

Business Motivation

- **Project Retrospective Goals:**

  – **Collect factual information on project performance…**

  – **Improve process, procedures, management, culture, etc.**

  – **Capture collective wisdom…**

  – **Repair damage to project team…**

  – **Enjoy the accomplishment**

  – **Get the story out…**

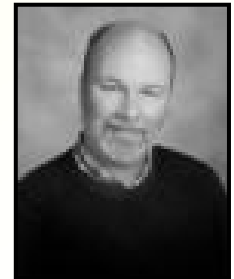Kerth, N. L., <u>Project Retrospectives – A Handbook for Team Reviews</u>, Dorset House, 2001.

Project Retrospective Overview

- **Norm's Prime Directive**

    "Regardless of what we discover, we must understand and truly believe that everyone did the best job he or she could, given what was known at the time, his or her skills and abilities, the resources available, and the situation at hand."

Norman Kerth

Kerth, N. L., Project Retrospectives – A Handbook for Team Reviews, Dorset House, 2001.

Getting Started

- **Select an experienced facilitator**…

- **Identify participants**…

- **Facilitator interviews participants**…

- **Identify required preparation** …

- **Plan events so everyone can participate**…

Getting Started...

- **Select an experienced facilitator**...
  - **who was not associated with the project in any way**
  - **is ideally a disinterested third party**
  - **is not biased**
  - **has good meeting management skills**
  - **Facilitator can make or break the retrospective**

- **Identify participants**...
  - **Everyone directly involved with project, including managers**
  - **Explain Retrospective Process**...
  - **Get commitment to participate**...

Getting Started...

- **Facilitator interviews participants...**
  - **To get a sense of what happened**
  - **To identify any sensitive issues, personalities...**
  - **To prepare to handle these issues should they come up**

- **Identify required preparation ...**
  - **Each participant asked to recall what happened from their perspective**
  - **Each participant asked to bring artifacts important to them and be prepared to discuss their significance to project**

Getting Started...

- **Plan events so everyone can participate…**

    - **Off-site locations are best…**

    - **Comfortable meeting room…**

    - **Breakfast and lunch brought in each day…**

    - **Evening team-building activities…**

    - **Prizes and fun…**

Day 1

- **Day 1 Objectives**
  - **Reinforce idea that retrospective is not about finding fault, but for learning how to do it better next time**

  - **Create a feeling of safety – so people feel comfortable speaking openly and honestly about what happened**

- **Day 1 Agenda**
  - **Establish ground rules…**
  - **Create Safety Exercise**
  - **Define Success Exercise**
  - **Lunch**
  - **Discuss Artifacts Exercise**
  - **Project Timeline Exercise**
  - **Evening Events…**

Establish Ground Rules...

- When someone is speaking, we will not interrupt them

- We will accept everyone's opinion without judgment

- We will talk from our own perspective and not speak for anyone else

- There will be no jokes made at the expense of anyone else

- When someone is holding the designated object, then only that person may speak

- While everyone is encouraged to contribute, your participation in discussions and exercises is optional

Kerth, N. L., Project Retrospectives – A Handbook for Team Reviews, Dorset House, 2001.

"Create Safety" Exercise

- **Purpose**
  - **To create an atmosphere where everyone feels comfortable talking openly about important issues**

- **Process**
  - **Assess "safety" with a safety scale and vote by secret ballot…**
  - **Based on the results of the vote, facilitator determines if:**
    - **Everyone feels reasonably safe talking openly**
    - **Or additional steps are needed to increase level of safety…**

- **Bottom Line**
  - **We can't begin until everyone feels safe talking openly and honestly about their experiences…**

Kerth, N. L., Project Retrospectives – A Handbook for Team Reviews, Dorset House, 2001.

Safety Scale

5	Hey, no problem, I feel comfortable saying anything.
4	I'll say most things but a few things might be hard to say.
3	I'll share some things but keep some things to myself.
2	I'm not going to say much. I'll let others bring up issues.
1	I won't let managers know what I really think.

Kerth, N. L., Project Retrospectives – A Handbook for Team Reviews, Dorset House, 2001.

"Create Safety" Exercise

- **The secret ballot is held and facilitator tallies results**

- **Mostly 4's and 5's, there's no problem - retrospective can continue…**

- **Mostly 2's and 3's, there is a problem and facilitator needs to address it…**

"Create Safety" Exercise

- **The team forms natural affinity groups**

  - **Team members silently move toward people with whom they have worked closely on this project**
  - **Each group finds a corner and they brainstorm ideas for how to increase safety…**

- **Each group brings presents items discussed within group**

- **Once whole team reaches consensus, a second secret ballot is taken and hopefully, results mostly 4's and 5's…**

"Define Success" Exercise

- **How do you define "success"?**

  - **A successful project is one on which <u>everyone</u> says:**

    "I wish we could do that over again – the very same way."

- **Was this project a "success"?**

Kerth, N. L., <u>Project Retrospectives – A Handbook for Team Reviews</u>, Dorset House, 2001.

"Define Success" Exercise

- **Some industry data…**

  - **31% of projects are canceled before they ever get completed**

  - **53% of projects cost 189% of their original estimates**

  - **On average, only 16% of software projects are completed on-time and on-budget**

  - **For small software companies, 78% of their software projects are deployed with at least 74% of their original features and functions**

The Chaos Report, prepared by the Standish Group, 1994.

Project Facts

- **List some key objectives achieved by Project Team**

- **For example:**
  - **You completed the project (it wasn't cancelled)**
  - **You delivered X% of all promised features**
  - **You delivered ### bug fixes in addition…**
  - **etc.**
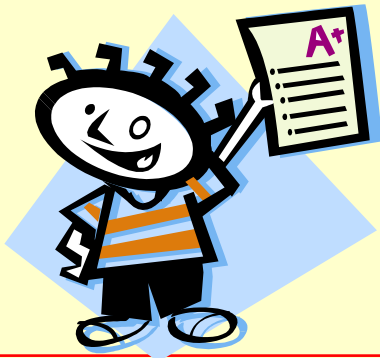
Artifacts

- **A Project Retrospective is like an archeological dig**…

    - **Most people tend to only remember what occurred during the last part the project**

    - **We need to uncover and discuss evidence of what actually occurred throughout the entire project**

    - **Artifacts are evidence**

    - **About a week in advance of the retrospective, each participant is asked to search for important artifacts related to the project**

©Silverander, EthnoGraphics®

Examples of Artifacts

- **Documents:**
  - **Project Schedules**
  - **Marketing Requirements**
  - **Software Functional Specs**
  - **Architecture and Design documents**
  - **Significant E-mails**

- **Napkins with important architecture drawings…**

- **Coffee cups, pizza boxes, a can of "bug" spray, or other artifacts that represent long hours of work…**

"Discuss Artifacts" Exercise

- **Artifacts are placed on table**

- **Each person discusses artifact they brought and its significance to them on this project…**

- **After all artifacts are discussed, group votes for the:**
  - **Most significant**
  - **Most unusual**
  - **etc…**

- **Prizes awarded by facilitator…**

"Create Project Timeline" Exercise

- **Each group works in a separate area**

- **Inclusive not consensual** **activity…**

- **Each group identifies** **significant events** **that occurred during project:**

    - **Write event on post-it note along with approximate dates**

    - **Anyone who thinks an event was important, creates a post-it for it…**

    - **Use** **artifacts** **to stimulate your memory**

Evening Activities…

- **Evening Activities planned to:**
    - **Help repair damage to team**
    - **Foster sense of belonging**
    - **Have fun and see people in different light…**
    - **Focused around dinner and after dinner activities…**

Day 2

- **Day 2 Objectives**
  - **Glean wisdom from Project Timeline**

- **Day 2 Agenda**
  - **Review Results from Day 1**
    - Adjust ground rules if necessary...
  - **Mining for Gold Exercise**
  - **Lunch**
  - **Complete Mining for Gold Exercise**
  - **Closing Thoughts and Reflections**

"Mining for Gold" Exercise

- **Five Lists:**

  - **What worked well that we don't want to forget**

  - **What did we learn (Wisdom)**

  - **What should we do differently on the next project**

  - **What still puzzles us**

  - **What do we need to discuss in more detail**

Closing Thoughts and Reflections…

- **Are there any issues that need to be discussed that we haven't discussed so far?**

- **Was this retrospective worthwhile?**

- **What do you think will happen as a result of this exercise?**

Words of wisdom from a Jedi Master…

Pay it Forward…

If you found this talk to be of value…

Norm Kerth is a highly respected consultant who developed the Project Retrospective technique. Sadly, he was in a serious car accident and suffered a disabling brain injury. As a result, he cannot work and lives on a very limited income.

You can help recognize his contribution to our industry by sending a small donation. Checks can be made payable to Norm Kerth Benefit Fund and sent to Norm Kerth Benefit Fund c/o Process Impact, 11491 SE 119th Drive, Clackamas, OR 97015-8778. You can also visit Karl Weiger's website www.processimpact.com/goodies.shtml for more details about contributing to the fund.

Thanks.

Software Quality Consulting offers workshops on:

- **Writing and Reviewing Software Requirements**
- **Building Realistic Project Schedules from Software Requirements**
- **Software Verification & Validation**
- **Accurate Estimating and Scheduling Using Yellow Sticky Method**
- **Predictable Software Development**
- **Peer Reviews and Inspections**
- **Improving the Effectiveness of Testing**
- **Risk Management for Embedded Software Development**

- **Get more information at www.swqual.com/training/on_site.html**

- **Sign up for my monthly e-newsletter**   *Food for Thought* ™
  - **Visit www.swqual.com/newsletter/Subscribe.htm**