

# **Scaling Agile Methods – Results of Canadian Workshop (20-21 February 2003)**

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“Agile Methods Revisited”

# Scaling Agile Methods

- Workshop held in Banff, Canada last month
  - Goal was to identify ways to resolve issues associated with scaling agile methods for use on large projects
- Organizers included:
  - Hakan Erdogmus, National Research Council
  - Frank Maurer, University of Calgary
  - Don Reifer, University of Southern California
- Sponsors included:
  - ASERC
  - National Research Council
  - Rational Software
  - Thoughtworks
  - University of Calgary
  - University of Victoria

# Banff Scaling Workshop

- Attendees
  - Industry – 20 delegates (primarily working business projects from firms like BMW Financial Services, ClearStream Consulting, Sybase Canada and Trans Canada Pipeline, Ltd.)
  - Academia – 13 delegates (including 4 graduate students)
  - Government – 2 delegates from NRC
- Format
  - First day focused on defining the issues involved in scaling
  - Second day tried to identify ways to resolve issues
  - Both days focused on networking and getting academia and industry to work together to speed agile method adoption
- Product
  - Summary to be placed on Canadian Agile Network web site (<http://can.cpssc.ucalgary.ca/ws2003>)
  - Canadian Agile Network will be expanded to serve as portal for exchange of information and results

# Ten Top Issues

1. How do we scale agile for non-pure agile? (11 votes)
2. Can we generate guidelines for non-sweet spot agile projects? (9 votes)
3. What do we do to augment agile practices to fit large projects? (7 votes)
4. How do we address integration of legacy, COTS, components, etc. within an agile project? (6 votes)
5. How do you scale agile within an enterprise across applications? (6 votes)

# Issues (Completed)

6. How do you handle dispersed development within an agile project? (6 votes)
7. Who does integration testing as systems get bigger from a customer viewpoint? (5 votes)
8. What is agile (when polluted)? (5 votes)
9. What project management practices do we use for large agile projects? (4 votes)
10. How do we respond to RFP's when embracing agile methods? (4 votes)

# Ten Top Lessons Learned (by early adopters of agile methods)

1. Scaling of agile methods will continue to happen whether you like it or not.
2. Visibility for large projects can be increased via frequent planned time-boxed releases. The shorter the cycles the better.
3. Communications on large projects can be improved using daily meetings (Scrum of Scrums).
4. Up-front investment in architecture is needed to succeed when scaling agile methods.

# Lessons Learned (Continued)

5. Scaling of on-site customers can be successfully handled via a federation strategy.
6. Problems associated with scaling of collective ownership and code integration can be reduced via branching, cloning and wrapping of components.
7. When scaling agile methods, set expectations lower in terms of how much change you can achieve and/or tolerate.
8. When scaling large projects, empower your business analysts to be the voice of the customer.

# Lessons Learned (Completed)

9. We should try harder to take advantage of the lessons others have learned when introducing agile methods to large projects.
10. When scaling large projects, you can use a combination of compatible agile and traditional (plan driven) methods.

Last lesson is particularly applicable to the “Balancing agility and discipline” theme of the USC Workshop



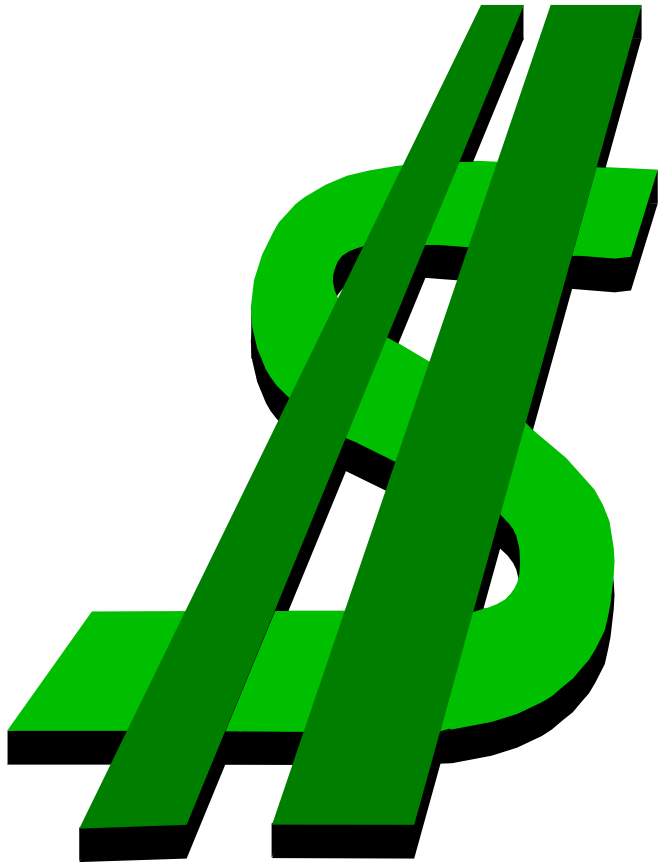
# Profound Advice

- **Martin Fowler** – argued that managers should try harder to do more with less by increasing their people's skill sets (not by focusing on process)
- **Don Reifer** – suggested that generating certain metrics make sense for agile programmers because they identify error-prone modules that are tend to be difficult to test
- **Ken Schwaber** – argued that we don't want to undermine the value of agile methods. Instead, we should use them only when they make sense and add business value

# Products and Next Steps

- Agreed:
  - Conduct another Canadian workshop next year on east coast
  - Continue the dialog, networking and collaboration
- Academics will:
  - Conduct empirical experiments using research projects at Univ. of Calgary and Univ. of Victoria
  - Teach agile methods to undergraduates at Univ. of Alberta and Univ. of Newfoundland
- Industry will:
  - Continue to try to scale agile methods for large projects
  - Consider sponsoring the expansion of the Canadian Agile Network

# Final Observations



- Results to date with agile methods have been very positive
  - Otherwise, fewer people would have attended from industry
- Results are hard to quantify empirically
  - Seeming distaste for metrics
- Sharing of experience between agile and process communities hard because of finger pointing and distrust

# Final Thoughts

- There are many roads that stimulate needed improvements
- Agile methods, process improvement, PSP/TSP and product lines are just a few of them
- Our jobs as software engineers is to understand them all and figure out which road to take, when and under what conditions
- I am an advocate of “whatever works”

