

A Fishbowl with Piranhas: Coalescence, Convergence or Divergence? The Future of Agile Software Development Practices: Some Assembly Required!

Steven Fraser
(Co-Facilitator)
QUALCOMM

Linda Rising
(Co-Facilitator)
Independent Consultant

Scott Ambler
IBM

Alistair Cockburn
Humans and Technology

Jutta Eckstein
Objects in Action

David Hussman
SGF Software

Randy Miller
Microsoft

Mark Striebeck
Google

Dave Thomas
Object Mentor, Bedarra

Abstract

Agile software development practices including XP and Scrum have risen to prominence within the software engineering community over the past ten years. Are agile software development practices converging? Are some practices becoming more integrated and/or more widely adopted than others? In the early 90s there was a convergence of object-oriented design methodologies – is a similar pattern being repeated within the agile software development community? Several years ago conferences featured debates on the number of practices inherent to XP – or for that matter what constituted XP. Is the Agile community on the verge of converging to standardization or do individual practices retain their individually and evangelists/disciples? A somewhat related question is: Can an agile practice be applied out of the box or is some assembly required? What does it take to get agility going in an organization? Does it work as advertised? What practices work and play well with others? Hear the experiences of panelists in their attempts to actually make agile work in the real world. From Crystal, DSDM, FDD, LEAN, Scrum, to XP (and others) – participants will to share their perspectives and experiences. Be warned – this fishbowl will be stocked with piranhas!

Categories & Subject Descriptors: 6.1.a Management of Computing and Information Systems; 2.18 Software Engineering Process

General Terms: Software life cycles

Keywords: Agile Software, Crystal, LEAN, Scrum, XP

1. Steven Fraser (co-facilitator), sdfraser@acm.org

STEVEN FRASER joined QUALCOMM's Learning Centre in San Diego, California in 2005. Previously Steven held a variety of software technology roles at BNR-NT-Nortel, including: Process Architect, Senior Manager (Disruptive Technology), and Advisor (Design Process Engineering). In 1994 he spent a year as a Visiting Scientist at the Software Engineering Institute (SEI) collaborating with the "Application of Software Models Project" on the development of team-based domain analysis techniques. Since 1994, Steven has regularly organized and moderated panels at ACM's OOPSLA and other software conferences – serving as

OOPSLA panels chair in 2003 and as XP2006's General Chair. Steven holds a doctorate in Electrical Engineering from McGill University in Montreal, Canada. Steven is a member of the ACM and a senior member of the IEEE.

2. Linda Rising (co-facilitator), risingl1@cox.net

LINDA RISING holds a doctorate from Arizona State University in the field of object-based design metrics. Linda Rising's experience includes university teaching and industry work in: telecommunications, avionics, and strategic weapons systems. An internationally known lecturer on topics related to patterns, retrospectives, customer interaction, influence strategies, and the change process – Linda is the author of numerous articles and four books – *Design Patterns in Communications*, *The Pattern Almanac 2000*, *A Patterns Handbook*, and *Fear Less: Patterns for Introducing New Ideas into Organizations*, written with Mary Lynn Mann.

3. Scott W. Ambler, swa@ambysoft.com

SCOTT W. AMBLER is the Practice Leader: Agile Development in IBM Rational's Methods Group and is the founder of the Agile Modeling (AM), Agile Data (AD), Agile Unified Process (AUP), and Enterprise Unified Process (EUP) methodologies. Scott is the (co-)author of several books, including *Refactoring Databases*, *Agile Modeling*, *Agile Database Techniques*, *The Object Primer 3rd Edition*, and *The Enterprise Unified Process*. Scott is a columnist with *Dr. Dobb's Journal*.

Agile is in the process of crossing the chasm and is clearly becoming mainstream. The challenge is that the needs and desires of organizations on the right-hand side of the chasm are different than those on the left-hand side, thus we're seeing changes within agile approaches which reflect those new needs. It is time to go beyond the "extreme rhetoric" and have a coherent discussion about agile approaches to scaling, modeling, documentation, regulatory compliance, data issues, enterprise architecture, reuse, and portfolio management (to name a few).

4. Alistair Cockburn, acockburn@aol.com

ALISTAIR COCKBURN, internationally renowned project witchdoctor and IT strategist is best known for describing software development as a cooperative game, for helping craft the Agile Devel-

Copyright is held by the author/owner(s).

OOPSLA'06 October 22–26, 2006, Portland, Oregon, USA.

ACM 1-59593-491-X/06/0010.

opment Manifesto, for defining use cases, and for developing the initial response technique message form.

Converging on Divergence: In a few years, there will be three camps: those who agree that there is no possibility for a common software development methodology, those who agree to disagree, and those who disagree with that. Experienced practitioners will agree that the appropriate method to use is highly context dependent, that one size cannot fit all, that there cannot be a convergence to a single methodology. Inexperienced practitioners and high-level executives will nonetheless fruitlessly search for the single methodology they can deploy across the entire organization, and die-hard fans of particular methodologies will cling tightly to their belief that their way is best.

5. Jutta Eckstein, jutta@jeckstein.com

JUTTA ECKSTEIN is an independent consultant and trainer for over ten years. She has a unique experience in applying agile processes within medium-sized to large mission-critical projects. This is also the topic of her book *Agile Software Development in the Large*. Besides engineering software she designed and delivered object technology courses in industry. Jutta has also completed her teacher training and led many *train the trainer* programs. Jutta focuses on techniques which help teach OT and is a principal lead on a pedagogical patterns project. She is a member of the board of the Agile Alliance and a member of many program committees in Europe and the US on agile development, object-orientation and patterns.

At the moment both trends are extremely visible: Ever so often we observe coaches focusing and insisting on specific practices and ignoring the fact that those (agile) practices are not appropriate for the specific team in its environment. And even worse by insisting on the use of those practices - the agile value system is completely ignored. So the focus on the practices can even undermine the value system. On the other hand in the community there are more and more discussions where people agree that agility is an attitude or a culture that is not manifested in a specific methodology. The hope is that the latter will make up for the future, whereas the specific agile methodologies just will be used as toolboxes, of which tools are used whenever needed.

6. David Hussman, david.hussman@sgfco.com

DAVID HUSSMAN is the co-founder of SGF Software in Minneapolis and has been creating software for more than 13 years in a variety of domains including: digital audio, digital biometrics, medical, retail, and education. For the past five years, David has mentored and coached agile teams in the U.S., Canada, Russia, and Ukraine. Along with leading workshops and presenting at conferences in the U.S. and Europe, David has contributed to several books (*Managing Agile Projects* and *Agile in the Large*) and is a senior consultant with The Cutter Consortium.

The “ironic” is the agilist who cannot adapt beyond a prescribed way of working – while the “tragic” is the project community which claims to use agile because they have randomly adopted a few practices, yet they have failed to embrace the principles, leading to constant struggles and many other old school problems. David is happy to hear fewer people making statements - “you are not doing XP if you are not...” or “in Scrum, you must...”. David observes more and more project communities adopting agile practices without naming a specific flavor of agile. While David is happy that we are evolving toward more organic adoption and away from the evangelism needed to get the movement going.

There is little evidence of communities that can or do adopt all the practices names for a particular agile style. Healthy agile transitions take place when a community maps what is working and not working in their current process to a selection of an agile style, practices, and principles. This kind of directed selection may draw from XP, Scrum, Lean or another agile flavor. Without regard to the practices selected, or their origin, the community must be ready to adopt the core agile principles (which underlie all agile styles), if they are to see the benefits of choosing an agile path.

7. Randy Miller, randy.miller@microsoft.com

RANDY MILLER, also known as Granville Miller, is an architect and the author of Microsoft's new agile software development process, MSF Agile. He has spent almost twenty years in the software industry, at IBM and Nortel as well as start-ups such as BroadBand Technologies, Make Systems, Access Network Management, and TogetherSoft. Randy led an XP project at AMN and documented the work of another XP development team at TogetherSoft in *A Practical Guide to Extreme Programming*. His interests include software development technology and agile software development processes.

Agile software development is rapidly evolving. A new generation of agile processes is emerging that is more inclusive. This new generation of agile software development processes includes additional roles, such as the architect and tester. It also includes new techniques in agile architecture and test to bring agile software development to the rest of the software development team. These new processes include Industrial XP, XP v.2, and MSF for Agile Software Development.

8. Mark Striebeck, mark.striebeck@gmail.com

MARK STRIEBECK is a project manager at Google where he is helping teams to adopt and adjust agile development practices. He has been working for more than 10 years in the software industry in all kinds of engineering and management positions. Since discovering XP and agile development methodologies 4 years ago, he has become actively engaged in the agile community, and tries to put new ideas and agile approaches to work.

Mark Striebeck ran his first agile projects strictly by the book. Later, he started to introduce individual agile practices in a variety of situations for different project teams. The last N teams that he worked with ended up with N different processes – this sounds a lot like divergence. But there are some practices that he always introduces and sees as the core of agile development – other practices are added *a-la-carte*. That sounds like convergence to some core practices.

9. Dave Thomas, dave@bedarra.com

DAVE THOMAS is the founder of Bedarra Research Labs, Managing Director of Object Mentor and adjunct research professor at Carleton University and the University of Queensland. Object Mentor is a leader in Agile Development methods and practices. Dave's focus at Object Mentor is *Agile in the Large*. Dave recently assisted in the formation the Eclipse Process Framework (EPF) initiative and is collaborating with Ivar Jacobson on a greatly simplified UP called EssUP. Bedarra's current focus areas are eLearning, Next Generation Application Development, and Pervasive Computing. Dave is well known to the object community as the founder of Object Technology International (OTI), developers of virtual machines for Smalltalk, Java and IDEs for IBM VisualAge Smalltalk/Java and Eclipse. Dave was a founding

director in Agile Alliance and is a columnist for the Journal of Object Technology (JOT).

Agile Methods Are Dead - Agile Practices Are Changing Software Development! Practices require practice! You can't build software from a book, even a really good one. When we focus on practice we improve what we do through dialog and examples of what we do. Process-Methods should be determined they need (www.jot.fm/issues/issue_2006_01/column1). There are many challenging areas in large scale development, legacy systems,

mission critical and outsourced development which are not addressed by popular agile practices. The success of Agile in these demanding environments requires interpreting the Agile values in those contexts.