Experiences in deploying agility@scale

Scott W. Ambler

Chief Methodologist for Agile and Lean, IBM Rational

scott_ambler@ca.ibm.com

Julian Holmes
Founder, UP Mentors
julian @upmentors.com

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Introduction

- Achieving greater "agility" is a common software delivery organisation ambition
- But, Agile methods do not naturally support large-scale challenges
- However, IBM Rational's agility@scaleTM solutions do
- Topics of discussion, and lessons learned, include:
 - Guidance context-rich for practice adopters
 - Education including IBM and home-grown solutions
 - Community practitioners around the globe adopting and contributing
 - ▶ Distribution projects delivered around the globe using a common approach
 - ▶ Commercials with "ethical" contracts delivering win-win scenarios
 - ▶ Plus much more... with time for plenty of questions





Agile Scaling Model (ASM)

Core Agile Development

- Focus is on construction
- •Goal is to develop a high-quality system in an evolutionary, collaborative, and self-organizing manner
- Value-driven lifecycle with regular production of working software
- Small, co-located team developing straightforward software



- Extends agile development to address full system lifecycle
- Risk and value-driven lifecycle
- Self organization within an appropriate governance framework
- Small, co-located team delivering a straightforward solution

Agility at Scale

Disciplined agile delivery and one or more scaling factors applies





What is disciplined agile delivery (DAD)?

- Disciplined agile delivery is an evolutionary (iterative and incremental) approach that regularly produces high quality solutions in a cost-effective and timely manner via a risk and value driven lifecycle.
- It is performed in a highly collaborative, disciplined, and self-organizing manner within an appropriate governance framework, with active stakeholder participation to ensure that the team understands and addresses the changing needs of its stakeholders.
- Disciplined agile delivery teams provide repeatable results by adopting just the right amount of ceremony for the situation which they face.



- "Fits just right" process
- Continuous testing and validation
- Consistent team collaboration
- Rapid response to change
- Ongoing customer involvement
- Frequent delivery of working solutions





Agile scaling factors







Geographical distribution

Co-located Global

Disciplined Agile Delivery

Domain Complexity

Straight -forward Intricate, emerging



Enterprise discipline

Project Enterprise focus

Organization distribution (outsourcing, partnerships)

Collaborative Contractual



Organizational complexity

Flexible Rigid

Technical complexity

Homogenous Heterogeneous,





- A global leader in consulting, technology, outsourcing, and local professional services
- 90k employees across 30 countries
- The Collaborative Business ExperienceTM
 - Developing closer, more effective, trust-based relationships
 - Boosting flexibility, agility, and creativity
- A successful IBM Rational Unified Process advocate and adopter (With some RINO!)
- An IBM Rational Software reference site in the UK
 - Custom Solution Delivery, a leading business unit
- Regularly facing the challenge of Agile scaling factors







The Solution – Agile RUP

- The next evolution of how Capgemini's Software Engineers should work
 - Combining Rational Unified Process principles with Agile practices
- Reacting to changing market needs
 - Smaller projects
 - Dynamic requirements and funding decisions
 - ▶ Early Return-on-Investment and delivered value
 - Customers want more Agile delivery



- Solutions developed by practitioners, for practitioners
 - Minimal top-down method imposition
 - Gathering best practices and experiences to be shared
- Suitable for any software delivery project
 - "Adapt the process" is still the key principle

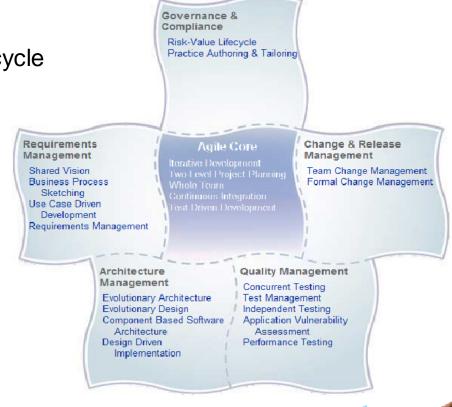




Agile RUP Solutions – Method

- Based upon the IBM Rational Method Composer practices for Scaling Agile Development
 - A combination of Agile and RUP
- Mostly standards re-use
- Maintains a focus on the Risk/Value lifecycle

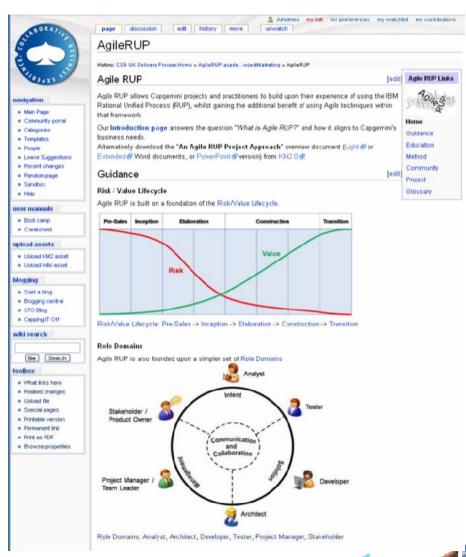
Inception	Elaboration	Construction	Transition
		Value	
	Risk		





Agile RUP Solutions - Guidance

- Developed on Capgemini Wiki (CWiki)
 - Mostly community contribution
- Guidance developed by:
 - Lifecycle phase
 - Practice
 - Role & discipline
- Additional guidance includes:
 - Sales and Bid teams
 - Estimation and Measurement
 - Distributed / RightshoreTM
 - Large-scale teams
 - Rapid Design and Visualisation
 - Engagement Management
 - Tools





Agile RUP Solutions – Education

- Further reading provided on CWiki
 - Articles, books, whitepapers
 - Case Studies and experiences
- Capgemini solutions:
 - Agile Awareness
 - Introducing Agile RUP concepts
 - Agile RUP Academy
 - Collaborative teamwork for generalising specialists
 - A week-long simulated project
 - Teaching Agile practices in a RUP context
- **IBM Solutions:**
 - Disciplined Agile Delivery workshop
 - Experiencing key agile practices in a disciplined context









Agile RUP Solutions – Community

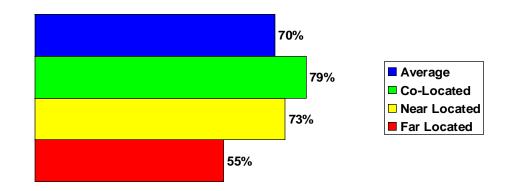
- Fostered by the adoption-project team
- Started within CSD UK
- Represents most regions
- Aligned to a global Software Engineers Community
- Enabled through collaboration tools, mostly
 - CWiki capturing knowledge
 - Yammer sharing and communicating
- Engagement follows the 1:9:90 rule
 - 1% creating
 - ▶ 9% commenting
 - ▶ 90% watching





Agile RUP – Distributed projects

- Distribution brings challenges:
 - Cultural differences
 - Communication breakdowns
 - Expectation and deliverable mismatches
 - Additional management and governance overhead
 - Time zone differences
- Agile RUP approach
 - A "one-team" mentality
 - One project budget no off-shore subcontracting
 - Consistent methods, terms and education
 - Local whole teams
 - ▶ Tool support focussed on collaboration





Agile RUP – Delivery contracts

- An excellent reputation for software delivery, but
 - Governed by clients that instinctively trusted no-one
 - Pushed toward a linear lifecycle
 - Constrained by overly bureaucratic quality assurance



- They had delivered "agile by stealth"
- Organisation culture was already to be collaborative
- A growing market demand for 'Agile'



- Establishing contracts and working practices was not
- Client commitment, requirements management, change procedures, acceptance...
- But it can be done, if everyone remains conceptually aligned





Agile RUP – Adoption project

- Small team +
 - Product Owner Capgemini Director
 - Team Leader Julian
 - Team CSD thought-leaders and evangelists
 - Community Actively encouraged to engage
- Planned using Agile RUP
 - 4-phase Risk / Value lifecycle
 - Product Backlog The needs of the PO
 - Work Items List The tasks for the team
 - Documented and managed on the CWiki
- Adoption projects
 - Mentored by a team of active practitioners
 - All fully Agile RUP trained and experienced
 - Joining projects at critical stages





Agile RUP – Success Examples

Local Government

- ▶ 10-person, 6 month project
- Proposed and implemented an Agile RUP approach to transform productivity
- Challenged client's linear and bureaucratic standards
- Delivered against challenging deadlines, securing further project work

National Government

- ▶ 40-person, 12 month project
- ▶ A trial project as part of a PRINCE2-dominated and bureaucratic outsourcing contract
- ▶ Client fully engaged, taking ownership, and "proud" of their project's success
- Agile RUP now being rolled out across the whole customer account

Multi-National "Blue-Chip"

- ▶ 100 person, 3-site, and 18-month programme
- Contract won on the basis of an Agile RUP proposal
- Previous supplier deliveries had failed with long waterfall approaches
- A true "agility@scale" solution with almost all the scaling factors



Experiences in adopting agility@scale - Summary

- The industry needs suppliers that can deliver agility@scale
 - Capgemini has demonstrated it can deliver with Agile RUP
 - ▶ The IBM Practice Libraries support this approach
- Agile RUP is a market differentiator for Capgemini
 - Contracts have been won, repeat business maintained, client relationships transformed
 - A natural fit with the company culture of client collaboration
- Challenges to adoption have been overcome
 - Demonstrating success and developing a passionate community
 - An opportunity for Capgemini people to contribute and be recognised
- Agile RUP may become the "official" Capgemini global standard









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