Becoming Agile in an Imperfect World

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A Quick Introduction

- Executive Vice President at Santeon
- Co-Author of “Becoming Agile”
- Over 12 years of dev and delivery experience
- Masters in Requirements Engineering
- Ph.D in Agile Adoption from Virginia Tech
- Agile Educator, Coach and Consultant
- Frequent Presenter at Conferences
- Program Chair of Agile 2009
- Co-founder of International Consortium for Agile
- PMI-Agile Certification Steering Committee
3 Components of Agile Adoption Effort

- **Getting Ready**
  - The Agile Mindset
  - Embracing the core values and principles
  - Secure Executive Buy-in: Organizational Change / Transformation
  - Readiness Assessment

- **Design and Piloting**
  - Creating a core team
  - Understanding the current process
  - Designing a new process and execute a pilot

- **Spreading Agile**
  - Redesign the process based on the pilot’s output and observation
  - Using agile with more projects or moving a few practices across the enterprise

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**Getting Ready: The Agile Mindset**

Agile is a mindset defined by values guided by principles and manifested through many different practices.

**The Agile Mindset:**

- Welcome Change
- Build and Feedback
- Continuous Delivery
- Value-Driven
- Small value-add slices
### Getting Ready: The Agile Mindset

<table>
<thead>
<tr>
<th>Predictable Manufacturing (Defined Process)</th>
<th>New Product Development (Empirical Process)</th>
</tr>
</thead>
<tbody>
<tr>
<td>It is possible to first complete specifications, and then build.</td>
<td>Rarely possible to create upfront unchanging and detailed specs.</td>
</tr>
<tr>
<td>Adaptation to unpredictable change is not the norm, and change-rates are relatively low.</td>
<td>Creative adaptation to unpredictable change is the norm. Change rates are high.</td>
</tr>
<tr>
<td>It is possible to identify, define, schedule, and order all the detailed activities.</td>
<td>Near the beginning, it is not possible. Adaptive steps driven by build-feedback cycles are required.</td>
</tr>
</tbody>
</table>

Source: IBM Global Services – Dr. Christoph Steindle

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### Square peg in a round hole ... again and again

“Try Harder, I am sure it will work !!!”  
“Great, I think it worked”
Feedback is Critical

Desired | Delivered
--------|----------
Traditional Development | Agile Software Development with continuous Feedback
Lack of Feedback | Feedback

Dr. Winston W. Royce
The Waterfall Model

I believe in this concept, but the implementation described above is risky and invites failure.}

Does Agile = Scrum / XP?

Agile is a mindset defined by values, guided by principles, and manifested through many different practices.

Scrum

XP

How to learn about Agile

Agile is a mindset defined by values, guided by principles, and manifested through many different practices.

Internalizing the Mindset, Values, and principles then applying the right practices and tailoring them to different situations as they arise.

Learning the practices and applying them without know the mindset and principles to know when to tailor and how to select the appropriate practices.

Shu, Ha, Ri
Getting Ready: Readiness Assessments

Virginia Satir Change Curve

Overlooking Readiness Assessment

Which Agile practices are you ready for? A research-based readiness assessment tool

www.DoctorAgile.com
Getting Ready: Readiness Assessments

Dr. Agile

2 out of 22 questions
What do you think the team collectively would say about the following statement?

Customers should be encouraged to regularly change their expectations for the product in development to ensure that it satisfies their business priorities.

Disagree

Agree

Strongly

Slightly

Neither

Slightly

Strongly

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Getting Ready: Readiness Assessments

Agile Practice | Assessment Characterization | Not Ready | Partially Ready | Likely Ready | Fully Ready
---|---|---|---|---|---
Managing Requirements Using a Backlog | 40% | 50% | 60% | 70% | 80% |
Working in iterations | 50% | 60% | 70% | 80% | 90% |
Working at speed | 60% | 70% | 80% | 90% | 100% |
Group Intention | 70% | 80% | 90% | 100% | 110% |
Early Staging Meeting | 80% | 90% | 100% | 110% | 120% |
Soft-Landings (new) | 90% | 100% | 110% | 120% | 130% |

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Phase 2: Design and Piloting

Core Team and Sub-core teams

Core Team
Strategic Guidance to the Transformation Initiative

Providing Tactical Guidance to sub-core teams
Governance on the sub-core team level
Daily follow-up with sub-core teams

Execution Team (Enterprise Level Coaches)
Execution Team Members are part of the Core team and fully dedicated to the initiative

Sub-core Team A  Sub-core Team B  Sub-core Team C  Sub-core Team J  Sub-core Team K
“Failure at an organizational level seems to come from the inability to customize processes and make them their own. Trying to apply someone else’s template to your organization directly doesn’t work well. It leaves out too many important details of the previous successes and ignores your company’s specific situation.”

-Kent Beck
Extreme Programming founder
in a 2006 interview with InfoQ.com
Making Agile work for YOUR environment

Agile is a mindset defined by values guided by principles and manifested through many different practices.

Pilot

- Piloting for Enterprise Adoption or Project-level Agile?
- Pilot Loudly or Pilot Quietly?
- Pilot or “Sandbox”?
- Importance of a Pilot
  - Test bed for culture readiness
  - Test bed for practice suitability in this org culture
- The ABO Continuum
  - Awareness
  - Buy-In
  - Ownership
Phase 3: Spreading Agile

Spreading Agile: The Spectrum

Highly Constrained  Increased Buy-in
Lower Energy  On Fire!
1. Technology Adoption Lifecycle illustrates the different stages of the adoption of a new technology.

2. There is a chasm between the Early Adopters and the Early Majority.

3. You need to change your adoption approach to successfully cross the chasm and spread your new technology (Agile in this case) from the early adopters to the early majority and across the rest of the enterprise.

**Crossing the Chasm: The Different Mindsets**

<table>
<thead>
<tr>
<th>Early Adopters</th>
<th>Early Majority</th>
</tr>
</thead>
<tbody>
<tr>
<td>Proponents of revolutionary change</td>
<td>Proponents of evolutionary change</td>
</tr>
<tr>
<td>Visionary users</td>
<td>Pragmatic Users</td>
</tr>
<tr>
<td>Project Oriented</td>
<td>Process Oriented</td>
</tr>
<tr>
<td>Willing to take risks</td>
<td>Averse to taking risks</td>
</tr>
<tr>
<td>Willing to experiment</td>
<td>Look for proven applications</td>
</tr>
<tr>
<td>Individually self-sufficient</td>
<td>May require support</td>
</tr>
</tbody>
</table>
There is a difference between having pockets of Agile across the organization and having a truly Agile organization that is flexible enough to respond to the speed of change of the market.

The approach to enterprise adoption is not just having more teams do Agile; there is a new agile mindset, values and principles that need to be spread across the IT organization and the ecosystems surrounding it.
Agile Adoption = Strawberry Jam

- Analogy: Creating an Agile organization is like making Strawberry Jam.
- You do not get jam by simply putting strawberries together. Similarly, an enterprise will not become agile by simply having more teams do Agile.
- Like Jam, there is something connecting all the “lumps” of strawberries together—this is the mindset, values and principles that need to be spread across the entire organization. Without this mindset, you cannot call it jam. It will just be Agile teams inside of a non-Agile organization.
- Keep in mind that any great strawberry jam needs to have lots of strawberry lumps.

We always need the pilots – they are the lumps

The energetic pilot teams will become the lumps of strawberry in the organizational strawberry jam.
## Spreading Agile: Value Driven Agile Adoption

### Stage 1: Collaborative
- **Embrace Change to Deliver Customer Value**
- **Plan and Deliver Software Frequently**
- **Human Centric**
- **Technical Excellence**
- **Collaboration with Business People**

<table>
<thead>
<tr>
<th>Stage</th>
<th>Description</th>
<th>Embrace Change to Deliver Customer Value</th>
<th>Plan and Deliver Software Frequently</th>
<th>Human Centric</th>
<th>Technical Excellence</th>
<th>Collaboration with Business People</th>
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<tr>
<td>Stage 1: Collaborative</td>
<td>Reflect and tune Process</td>
<td>Collaborative Planning</td>
<td>Collaborative Teams</td>
<td>Empowered and Motivated Teams</td>
<td>Coding Standards</td>
<td>Knowledge Sharing Tools (Wiki, Blogs)</td>
</tr>
<tr>
<td>Stage 2: Evolutionary</td>
<td>Evolutionary Requirements</td>
<td>Continuous Delivery</td>
<td>Incremental Iterative Development</td>
<td>Planning at different levels</td>
<td>Software Configuration Management</td>
<td>Tracking Iteration through Working Software</td>
</tr>
<tr>
<td>Stage 3: Integrated</td>
<td>Risk Driven Iterations</td>
<td>Maintain a list of all remaining features (Backlog)</td>
<td>Self-Organizing Teams</td>
<td>Frequent face-to-face communication between the team</td>
<td>Continuous Integration</td>
<td>Continuous Improvement (i.e. Refactoring)</td>
</tr>
<tr>
<td>Stage 4: Adaptive</td>
<td>Client Driven Iterations</td>
<td>Smaller and More Frequent Releases (4-6 Weeks)</td>
<td>Adaptive Planning</td>
<td>Agile Estimation (from Agile Modeling)</td>
<td>Daily Progress Tracking Meetings</td>
<td>Agile Documentation</td>
</tr>
<tr>
<td>Stage 5: Encompassing</td>
<td>Low Process Ceremony</td>
<td>Agile Project Estimation</td>
<td>Lean Agile Physical Setup</td>
<td>Test Driven Development</td>
<td>Pair Programming</td>
<td>Non-negotiable number of Cockburn Level -1 or 1b people on team</td>
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</tbody>
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### Key Points
- **5: Encompassing**
  - Establishing a vibrant and all-encompassing environment to sustain agility
- **4: Adaptive**
  - Responding to change through multiple levels of feedback
- **3: Integrated**
  - Developing high quality, working software in an efficient and integrated manner
- **2: Evolutionary**
  - Delivering software early and continuously
- **1: Collaborative**
  - Enhancing communication and collaboration
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<th>Low Process Ceremony</th>
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<td>Stage 4: Adaptive</td>
<td>Client Driven Iterations</td>
<td>Story Maps for Release Planning</td>
<td></td>
<td>Post-development Documentation</td>
<td>Collaborative, Representative, Authorized, Committed and Committed (CRACK) Customer Immediately Accessible</td>
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<tr>
<td>Stage 3: Integrated</td>
<td>Streamlining usability with development efforts</td>
<td>Multi-level Planning (Releases and Iterations)</td>
<td>Configuration Management</td>
<td>Automated Build and Deployment scripts</td>
<td>Agile Contracting</td>
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<td>Time-boxed Iterations</td>
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<td>Refactoring</td>
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<td></td>
<td>Steady Releases every 6 weeks</td>
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<td>Continuous Integration</td>
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<td>Burn-up Charts</td>
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<td>One-click-builds</td>
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<tr>
<td>Stage 2: Evolutionary</td>
<td>Evolutionary Requirements</td>
<td>Celebrating Success</td>
<td></td>
<td>No Big Design Upfront: Just in time design - high-level design on a release level and low-level design on an iteration level</td>
<td>Customer milestones are reflective of valuable releases of software not phases</td>
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<tr>
<td>Stage 1: Collaborative</td>
<td>Retrospectives</td>
<td>Whole-team collaborative planning</td>
<td>Empowered Cross-functional Teams</td>
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<td>Project Chartering</td>
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<td></td>
<td>User Stories with Acceptance Tests</td>
<td>Group Estimation using planning poker</td>
<td>Emotional Chart</td>
<td></td>
<td>Customer Commitment to work with Developing Teams</td>
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<td></td>
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<td>Maintaining a Backlog</td>
<td>Seek Volunteer</td>
<td>Teams Room with Information Radiators</td>
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<td></td>
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<td>Daily Standups</td>
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