Objective Agility

What does it take to be an Agile (software) company?

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Allan Kelly

- Training & Coaching for Agile adoption and deepening

- Author:

*97 Things Every Programmer Should Know*
Henney, 2010

*Context Encapsulation in Pattern Languages of Program Design*
Volume 5, 2006
Agile, Agile methods & Agile toolkit

The State of Agile (our objective)

- Quick on our feet
- Deliver quickly
- Respond to change rapidly
- Seize opportunities

Agile Methods
Promise to create the state of Agile

- Test Driven Development, Refactoring
- Iterations, Time boxing
- User Stories, Feature injection
- Retrospectives, ....

The Agile Toolkit

Scrum, XP, DSDM, Kanban, ...
Where is Agile?

The future is already here - it is just unevenly distributed.

Agile is already here - it is just unevenly distributed.

William Gibson, author, NPR interview 1999

Allan Kelly, 2010
Where do you find Agility?

• Sprinkling Agile dust does not make everything right
• Agile paints a picture of sweetness and light
  – An aspiration
• Agile is a reverse engineered term
  – A term used to describe where we want to be
Agile is already here - it is just unevenly distributed.

- Many companies exhibit some Agile characteristics
  - Easier for small companies to be Agile
- Large companies
  - Agile in some ways
  - Maybe not in others
Defining Agile

Professor Donald Sull of the London Business School ... defines [Agility] as a company’s ability consistently to identify and seize opportunities more quickly and effectively than rivals.

Repeatedly demonstrate agility - not a one off

Agile is what both the latest business strategy and software development methodology aspire to be.

Why be Agile?
What is Agile to you?

• Fashion?
  – Everyone else is doing it?

• Reduce costs?

• Improve ROI?
  – Which means?

• Avoid failure?

• Today:
  – Agile means better
  – Better IT delivery

• Tomorrow
  – Agile creates new opportunities
  – Competitive advantage
## Strategy, Portfolio & Operational Agility

| Strategic Agility          | • Patience: wait for right opportunity  
|                           | • Boldness: to act  
<table>
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<th>• Small probes: small acquisitions, alliances, minority stakes</th>
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| Portfolio Agility          | • Cultivate new opportunities; cull failing ones  
|                           | • Tools to evaluate projects; make difficult decisions  
|                           | • Develop internal staff and managers |
| Operational Agility        | • Exploit opportunities, cut-costs faster than competitors  
|                           | • Spot opportunities: systems to gather and share information  
|                           | • Act on information: processes to make decisions |

## Today - Operational Agility

### Operational Agility
- Exploit opportunities, cut-costs faster than competitors
- Spot opportunities: systems to gather and share information
- Act on information: processes to make decisions

### Where we are today
- IT centric
- Scrum for Project Management
- XP for Engineering
- Lean for Improvement

### Tension with non-Agile
- Portfolio
- Strategy

*Are we there yet?*
## Portfolio Agility

| Portfolio Agility | • Cultivate new opportunities; cull failing ones  
|                  | • Tools to evaluate projects; make difficult decisions  
|                  | • Develop internal staff and managers |

- Apply Agile principles
  - Time box / Regular rhythm
  - Decide as late as possible
  - Decide on value
  - Embrace change
Portfolio Agility

| Portfolio Agility | • Cultivate new opportunities; cull failing ones  
|                  | • Tools to evaluate projects; make difficult decisions  
|                  | • Develop internal staff and managers |

• End annual planning cycle  
  – Embrace experimentation  
• Iterative Portfolio review  
  – Regular schedule – monthly, quarterly  
• Projects & Teams demonstrate:  
  – Value added v. Cost  
• Align with  
  – Strategy, Risk profile, Resourcing  

RIP: 14 September 2008
Remember: Agile is Empirical

• Can’t know
  – How long it will take until you start doing
  – How many people you need until you start doing

• Teams have responsibility
  – Give them the tools, give them the problem

Do a little – Measure - Adjust

Deming / Shewhart cycle
PDCA: Plan, Do, Check, Adjust
Simple Portfolio recipe

• 10th of each month
  – Management by rhythm
• Each team 15 minutes
  – Benefits delivered / options created this month
  – Cost this month
  – What’s next?
  – Alignment to strategy (why do this?)
  – Requests, impediments, new opportunities

• Action: Status Quo, Grow, Shrink, Close
• Balance company resources, risk, innovation. etc.
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Strategy realized in Operational Decisions and the Structure/Form of organization
Strategy: Operational Decisions

• Thousands of small decisions make difference
  – Between Agile or not
  – Between strategy alignment or not
• Know the decisions you can delay
  – And those you cannot
  – Avoid early commitment
  – Recognize value in options
Strategy: Operational Decisions

- Fail fast, fail cheap
  - Experimentation over planning
  - Modern tools (+ Agile methods) = cheap to try
  - Only way to know is to try

- Know thy customer
  - Who are they?
  - What problems do they have?
  - What problem do you solve?
Strategy: Structure & Form

• Resource strategically
  – Keep teams together
  – Start small, grow slowly
  – Shrink to close

• Vertical teams with responsibility
  – End-to-end delivery

• Balance Managers to workers
  – Avoid too many Chiefs and too few Indians
Strategy: Structure & Form

• Limit Work In Progress
  – End salami slicing people between projects
  – More WIP, Less delivered
  – WIP makes it hard to see issues
  – Task switching is expensive

• Focus on outputs
  – Not inputs
  – Value add over cost
Strategy: Structure & Form

• Succession planning for Knowledge
  – Grow your own experts
  – Outsourcing can hollow out knowledge

• Short planning horizons with feedback
  – Railway timetable Portfolio reviews
  – Plan early, plan often, include feedback
What does this mean for a small software company?

• Big companies can’t do this
  – Wrapped up in own history & process

Therefore – **Opportunities**!

– Take on incumbents through Agility
– Supply Agility to incumbents
  • Products
  • Services
  • Your exit route
What does this mean?

Build effective delivery machine

Then

Move outwards and upwards
Move on up...

- Know your customer
  - Segment
  - Target
- Say No
  - Saying Yes is easy
  - Saying No is real strategy

Only about 20% of features & functions in typical custom software are used

Mary & Tom Poppendieck
Implementing Lean Software Development 2007
Use Agile to....

• Validate the market in the market
  Agile + Modern tools =
  Cheap to Try =
  Cheap to Fail

• Try: fail fast, fail cheap
  – Know when to try
  – Know when to stop

• Keep it Simple
The Agile Advantage

• **Agile Strategy**
  – Try lots of stuff, see what works

• **Agile Portfolio**
  – Keep experiments flowing
  – Stop the stuff that doesn’t work

• **Agile Operations**
  – Keep it fast
  – Keep it cheap
  – Keep quality

- **Live or Die Agile**
- **Think Agile**
- **Agile Toolkit & Methods**
Conway’s Law

Mel Conway, 1968, *How do committees invent?*

- The right corporate architecture will produce good system architecture
- Agile will be most effective when Strategy, Portfolio & Operations are all Agile

organizations which design systems (in the broad sense ...) are constrained to produce designs which are copies of the communication structures of these organizations
Thank you!

Questions?

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