

# Objective Agility

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



*Agile Cambridge  
October 2010*

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# Allan Kelly

- Training & Coaching for Agile adoption and deepening
- Author:
  - *Changing Software Development: Learning to be Agile*, Wiley 2008.

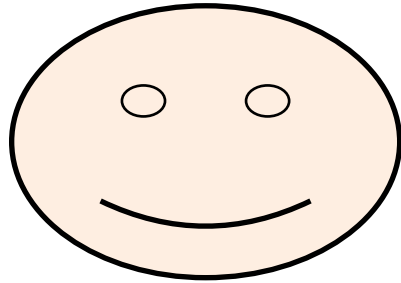


*Context Encapsulation in  
Pattern Languages of Program Design  
Volume 5, 2006*

*97 Things Every Programmer Should Know  
Henney, 2010*

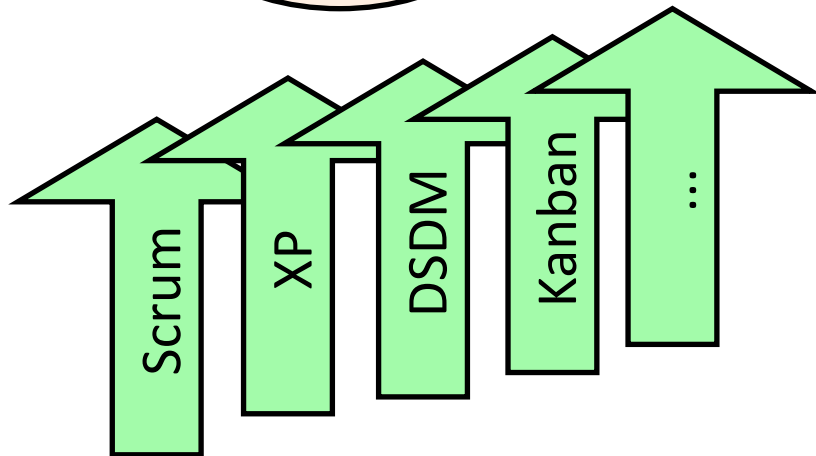


# Agile, Agile methods & Agile toolkit



The State of *Agile*  
(our objective)

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



Agile Methods

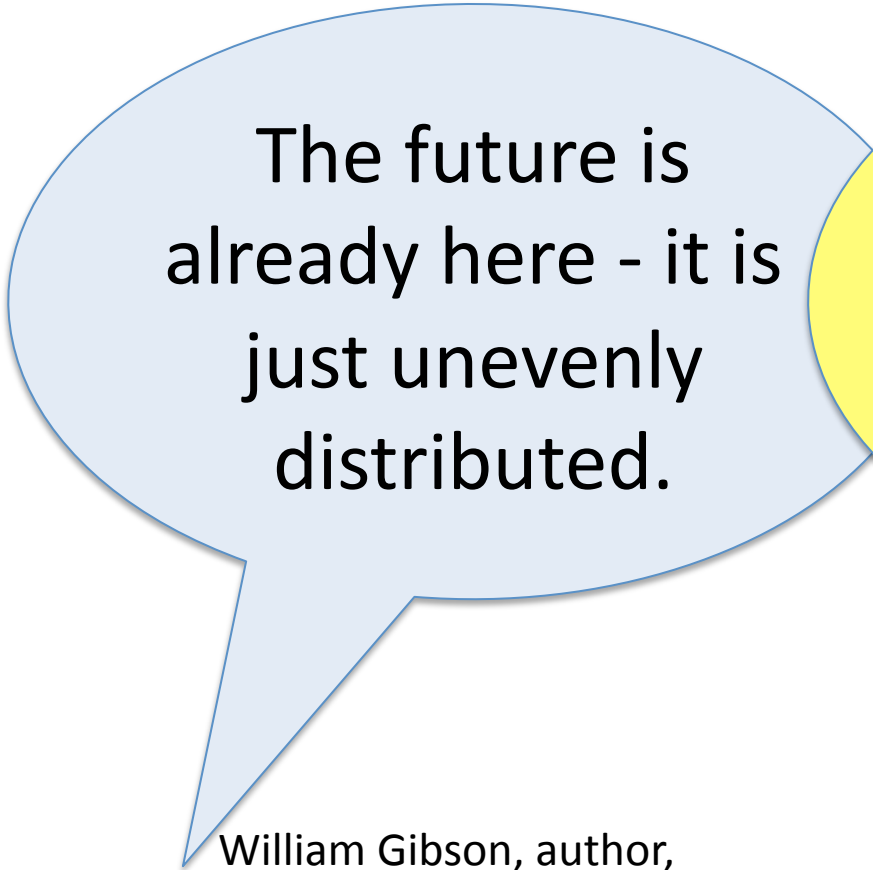
Promise to create the state of Agile



The Agile  
Toolkit

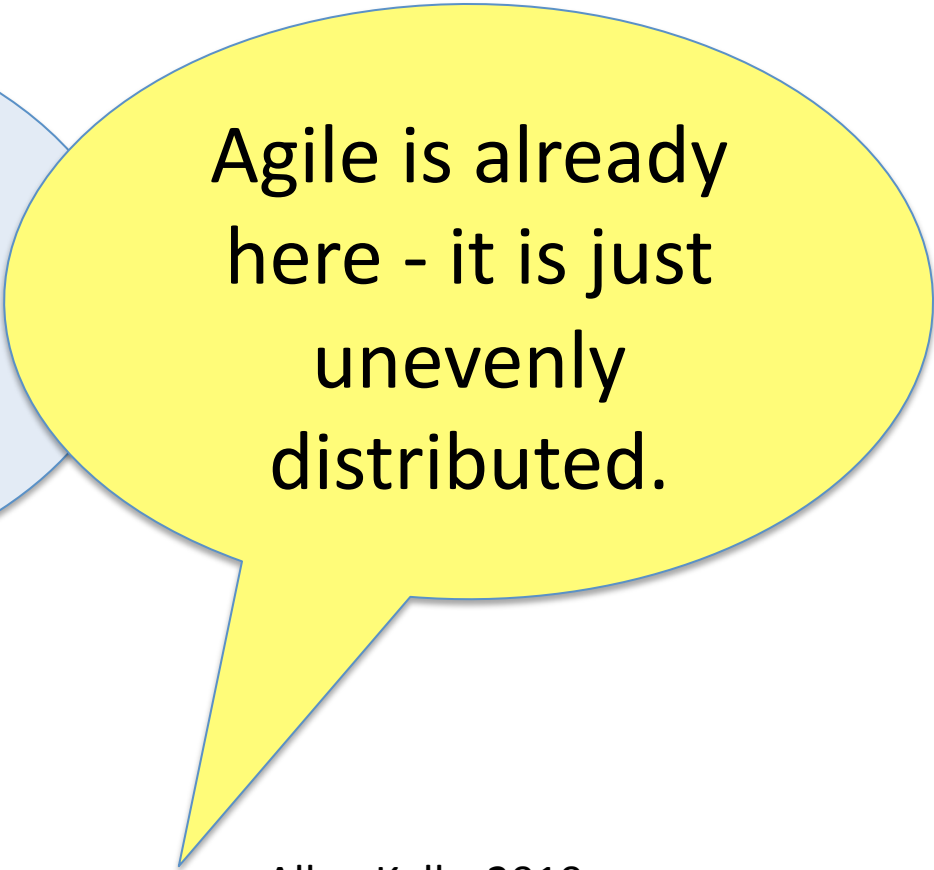
- Test Driven Development, Refactoring
- Iterations, Time boxing
- User Stories, Feature injection
- Retrospectives, ....

# Where is Agile?



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

William Gibson, author,  
NPR interview 1999



Agile is already  
here - it is just  
unevenly  
distributed.

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.

# (Waitrose)

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



**TOYOTA**



**TESCO**



*All logos and trademarks  
acknowledged*

# Defining Agile

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

Financial Times, 20 November, 2007, "Agility: Flexibility takes over from planning"

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**

# 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

<b>Strategic Agility</b>	<ul style="list-style-type: none"><li>• Patience: wait for right opportunity</li><li>• Boldness: to act</li><li>• Small probes: small acquisitions, alliances, minority stakes</li></ul>
<b>Portfolio Agility</b>	<ul style="list-style-type: none"><li>• Cultivate new opportunities; cull failing ones</li><li>• Tools to evaluate projects; make difficult decisions</li><li>• Develop internal staff and managers</li></ul>
<b>Operational Agility</b>	<ul style="list-style-type: none"><li>• Exploit opportunities, cut-costs faster than competitors</li><li>• Spot opportunities: systems to gather and share information</li><li>• Act on information: processes to make decisions</li></ul>



Donald Sull, McKinsey Quarterly, December 2009, [https://www.mckinseyquarterly.com/Strategy/Strategic\\_Thinking/Competing\\_through\\_organizational\\_agility\\_2488](https://www.mckinseyquarterly.com/Strategy/Strategic_Thinking/Competing_through_organizational_agility_2488)

# 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



Deming / Shewhart cycle  
PDCA: *Plan, Do, Check, Adjust*

# Simple Portfolio recipe



- 10<sup>th</sup> 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.

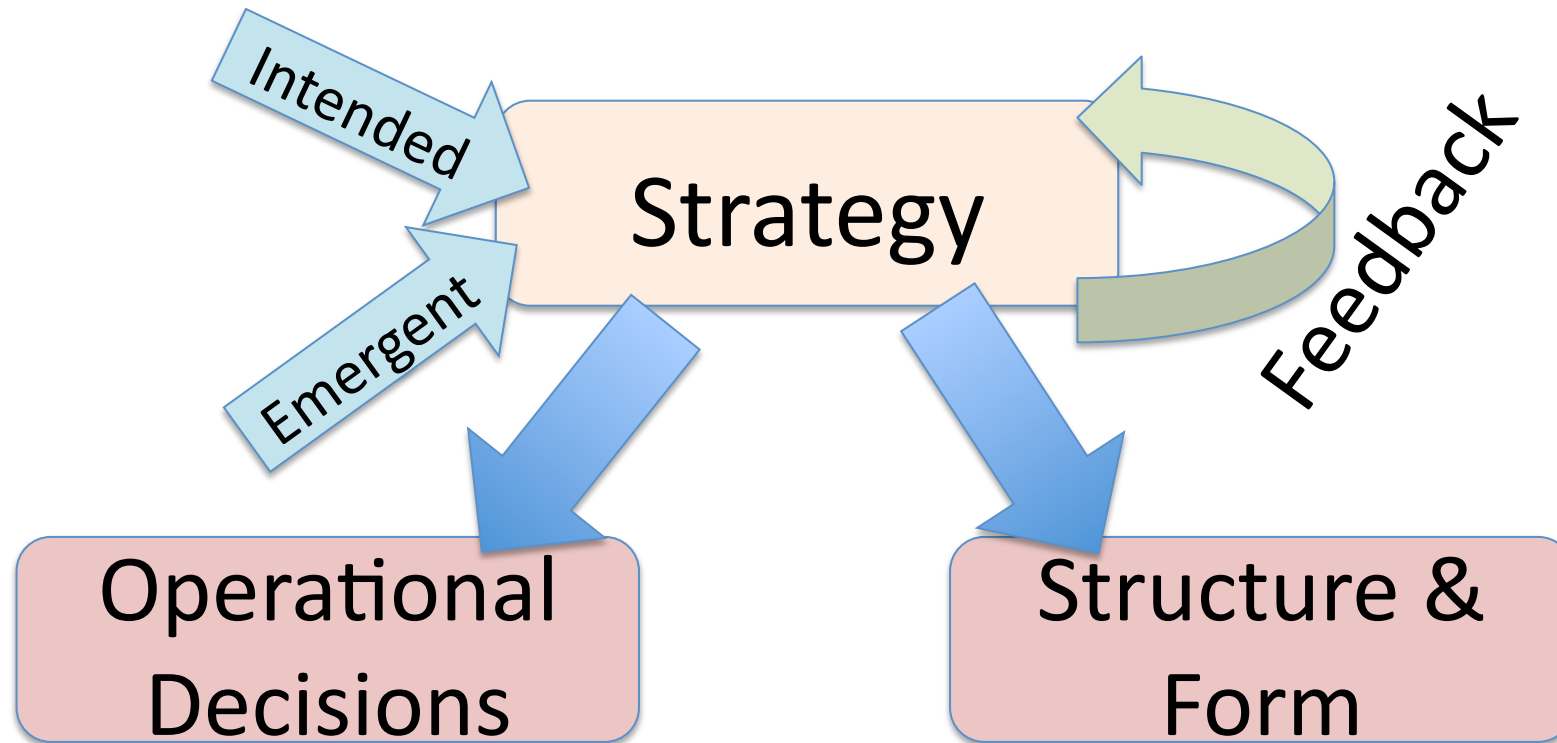
# Strategy

# Strategic Agility

- Patience: wait for right opportunity
- Boldness: to act
- Small probes: small acquisitions, alliances, minority stakes



# Strategy



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 to 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

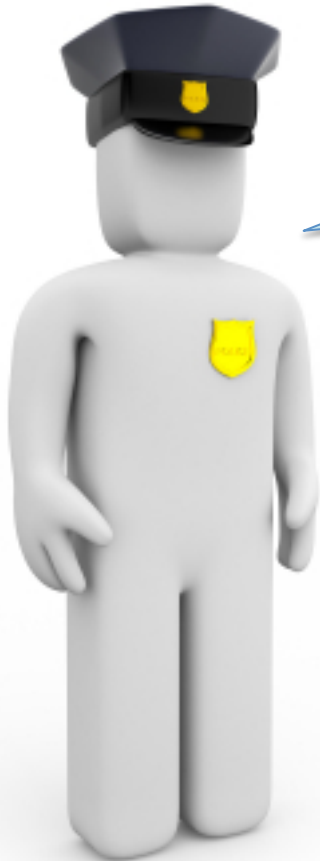
- Try: fail fast, fail cheap
  - Know when to try
  - Know when to stop
- Keep it Simple



# 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?*

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

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

Thank you!

*Questions?*

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