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:
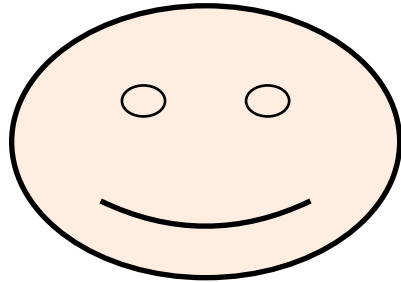 - *Changing Software Development: Learning to be Agile*, Wiley 2008.

97 Things Every Programmer Should Know
Henney, 2010

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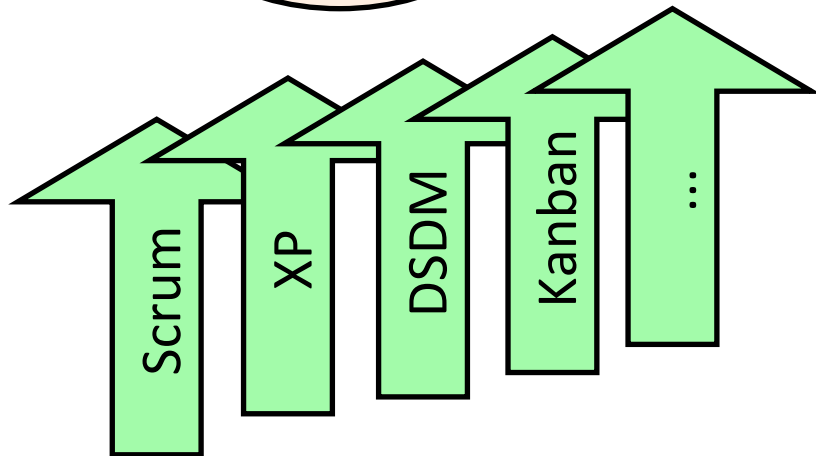*Pattern Languages of Program Design*
Volume 5, 2006

Agile, Agile methods & Agile toolkit

The State of *Agile*
(our objective)

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

Scrum   XP   DSDM   Kanban   ...
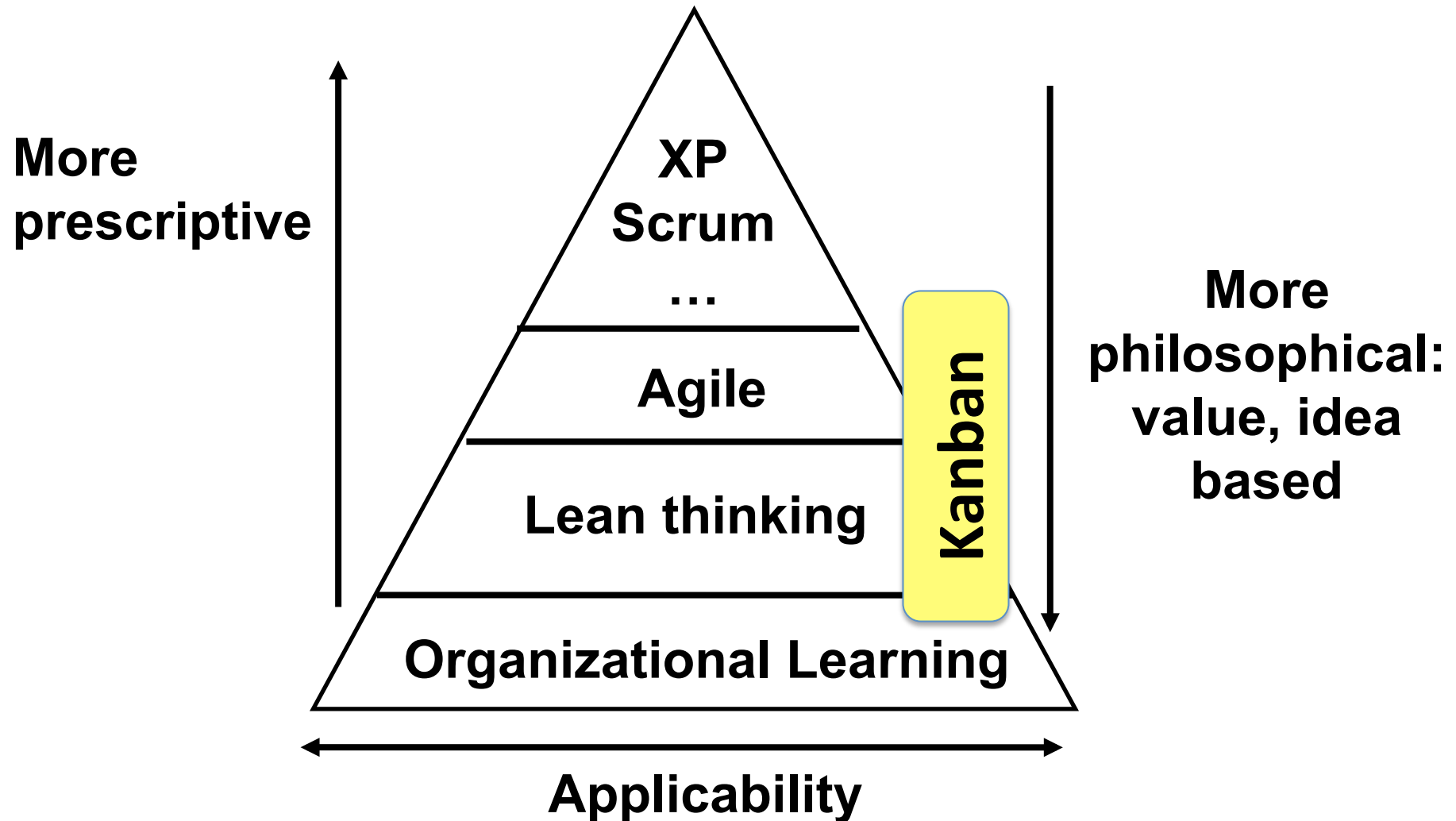
Agile Methods
Promise to create the state of Agile

The Agile Toolkit

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

Agile in context

More prescriptive

XP
Scrum
…

Agile

Lean thinking

Kanban

Organizational Learning

More philosophical: value, idea based
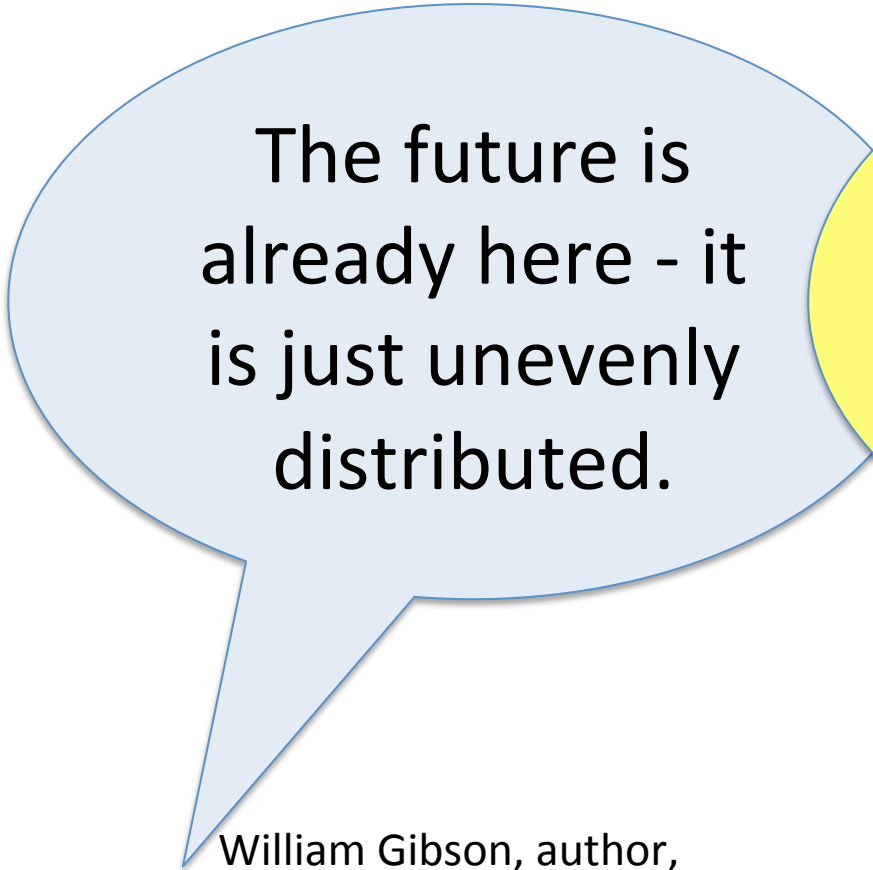
Applicability
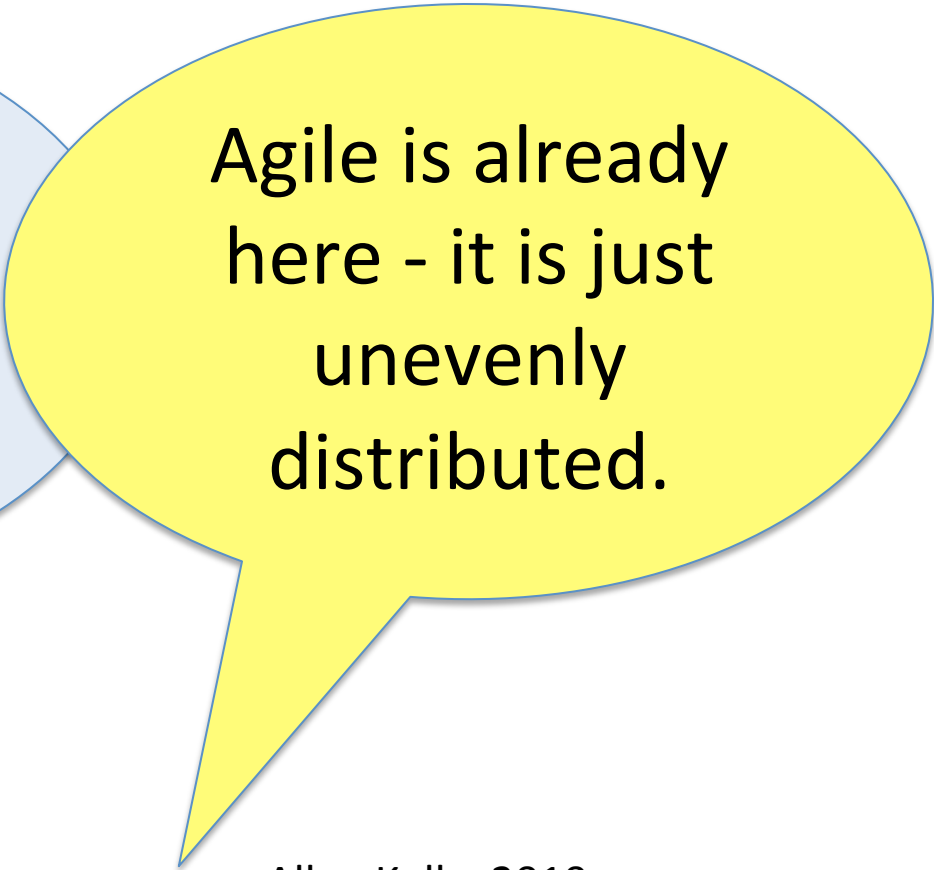
Where do you find Agility?

- 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

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

(Waitrose)

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

TOYOTA

Santander

TESCO

GE

ZARA

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Defining Agile

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

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.

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

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

I can't think of anything more important than building an agile company, because the world changes so quickly and unpredictably

[Agility] comes in different forms, but basically it's the ability to quickly adapt to or even anticipate and lead change.
Agility in the broadest form affects strategic thinking, operations, technology innovation and the ability to innovate in products, processes and business models.

Michael A Cusumano
Distinguished Professor of Management at the MIT Sloan School of Management

Strategy, Portfolio & Operational

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

Donald Sull, McKinsey Quarterly, December 2009, 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

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*

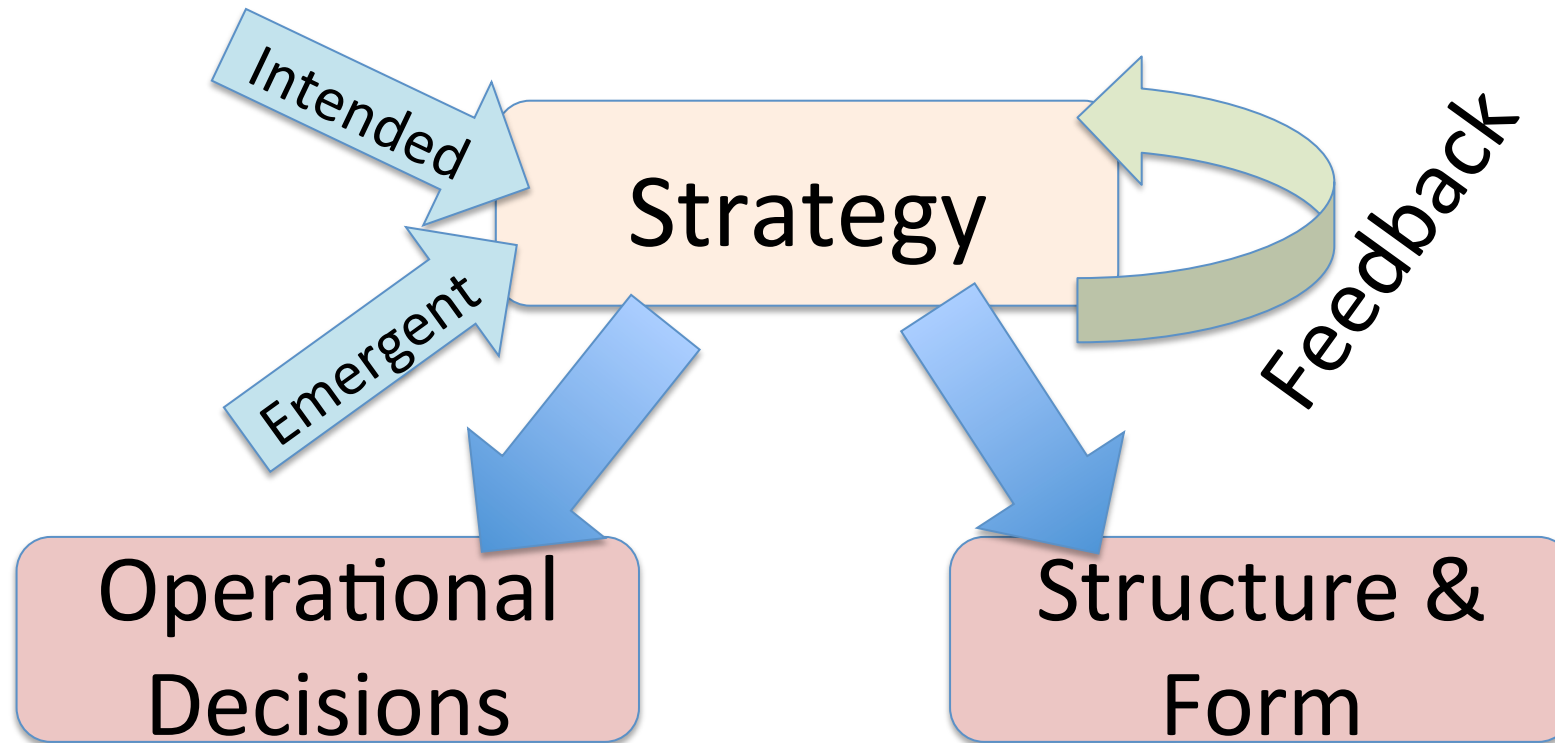- Balance company resources, risk, innovation. etc.

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 <u>teams</u> 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
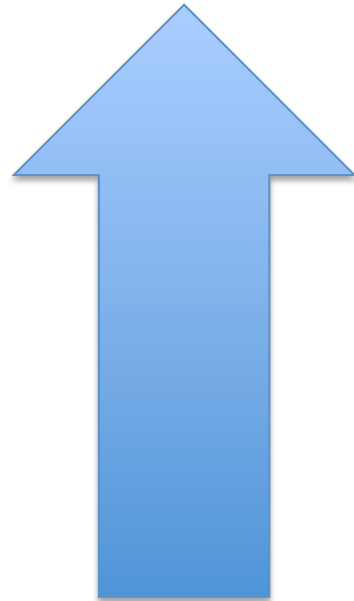 - Saying No is real strategy

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

Mary & Tom Poppendieck
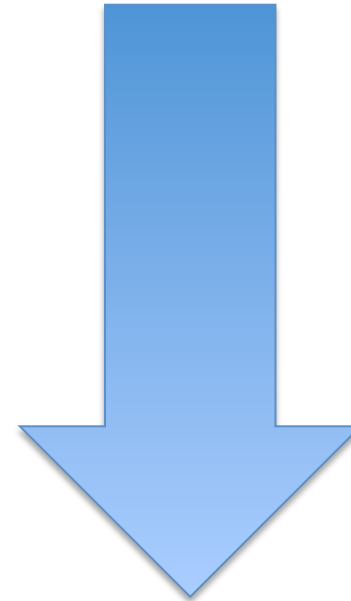*Implementing Lean Software Development* 2007

Push Up to Push Down

Pushing Agile up to Portfolio & Strategy

Pushes Agility down by devolving decisions

- Employees make decisions when & where they are needed
- More information, more timely
- Better decisions

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

Thank you!

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Questions?