Beyond Agile: Applied Antifragility

Version 4.2  Imax Dolby Remaster
October 22nd 2019
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PMP, PMI-ACP, CDAC, CDAI, CKP, PAL1, SPC4, SPS, PSPOI, PSDI, LSSYB, PSMI, CSM
Organizational Agility Advisor

- Enterprise Agile Practice Lead
- Enterprise Agile Methodology/Practice Lead
- Lean/Agile Coach
- Project and Portfolio Manager

Desjardins
Feb 2017 – July 2018

Doug Knesek
PSM, SPC4
Director of Agile Development & Coaching

Doug Knesek is a developer, coach, and leader of agile teams and organizations with nearly 30 years of industry experience. Doug started developing software in about 1990 when waterfall was king. He abandoned waterfall and transitioned to the Unified Process in 1995, then abandoned that in favor of Extreme Programming in the year 2000.

2016 - Present

2012 -2015

Teacher / Instructor 2010 -2019
Problem Statement

- Agile is beset by semantic diffusion
- Framework-driven imposed transformations fail
- The time has come to use agile as a springboard for a higher order of thinking: Antifragility
A Sense-Making Unified Model
From Red to Amber

High risk of getting pulled back in
Option blind

High-fidelity plans and designs up-front is the norm.

Optional paths aren’t discussed other than during the inception phase of developing “the plan”

Once the plan is set, the focus is on seeing that plan through to completion.
Division of labor
Command authority
Formal roles
Hierarchy
Processes
Red
Amber
Option Blind
Simple
Chaos
Complicated
Complex
Agile
Option generating
Option seeking
Option enabling
Option aware
Expert
Fragile
Antifragile
Fordism

• Successful industrial application of Taylorism
• For a while anyway...

Taylorism

• "Scientific" management
• Every Breath you Take
• Every Move you Make
Chaplinism

- “Modern Times” premiered in 1936
- Scathing critique of Taylorism
- 25 years after first Ford assembly line ...
Red
Division of labor
Command authority

Amber
Formal roles
Hierarchy
Processes

Orange
Innovation
Accountability
Meritocracy
Weberism, Sloanism, Druckerism

- Bureaucracy
- Company Men
- Cascading objectives / stovepipes
You are dimly aware that optionality might be the key to (improving ?) But you lack the understanding to act on this effectively
Red
- Division of labor
- Command authority

Amber
- Formal roles
- Hierarchy
- Processes

Orange
- Innovation
- Accountability
- Meritocracy
We need(ed) to break out of Orange
The 50s – 60s

• Birth of IT
• Early processes are agile, even ad hoc
The 70s

Introduction of predictive methods
The 80s

Predictive methods rule the roost
The 90s – 2000s  Creeping doubt
Was needed to break out of Orange
Red
- Division of labor
- Command authority

Amber
- Formal roles
- Hierarchy
- Processes

Orange
- Innovation
- Accountability
- Meritocracy

Green
- Empowerment
- Values-driven
- Stakeholder model

Fragile Simple Chaos Complicated Complex Antifragile

Option Blind Option aware Option generating Option seeking Option enabling
A Movement born in the IT sphere

In many ways, a return to the more freewheeling 50s and 60s
Predictive methods have had their day.
Time to knock down the silos...
... and relinquish central control
**Observed Benefits**

**VersionOne**
https://explore.versionone.com/state-of-agile

**Specific Improvements From Implementing Agile**

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<thead>
<tr>
<th></th>
<th>2005</th>
<th>2017</th>
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<tbody>
<tr>
<td>Accelerated Time-to-Market</td>
<td>86%</td>
<td></td>
</tr>
<tr>
<td>Increased Productivity</td>
<td>87%</td>
<td></td>
</tr>
<tr>
<td>Reduced Software Defects</td>
<td>86%</td>
<td></td>
</tr>
<tr>
<td>Reduced Cost</td>
<td>63%</td>
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**2017**

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<tr>
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<tbody>
<tr>
<td>Ability to manage changing priorities</td>
<td>71%</td>
</tr>
<tr>
<td>Project visibility</td>
<td>66%</td>
</tr>
<tr>
<td>Business/IT alignment</td>
<td>65%</td>
</tr>
<tr>
<td>Delivery speed/time to market</td>
<td>62%</td>
</tr>
<tr>
<td>Increased team productivity</td>
<td>61%</td>
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</table>
Scrum’s explicit promise of 4x productivity limited to outliers – the right hand side of the bell curve – recent study suggests 12% more the norm

... and average productivity increase is closer to 5% than 12% at “Scale”

(SAFe figures are also from Case Studies – again, the right side of the bell curve)

Quantitative Analysis of Agile Methods Study (2017): Twelve Major Findings

https://www.infoq.com/articles/reifer-agile-study-2017
World surveys 2018 - 19

166 (2018) and 254 (2019) organizations having embarked on an “agile” Transformation

https://businessagility.institute/
The results...

Were disappointing in 2018

Average business agility fluency

4.9

BAI  https://businessagility.institute/
The results...

And even a bit worse in 2019

4.4

Average business agility maturity (Walking)

79%

of companies have low business agility fluency (< 7)

BAI  https://businessagility.institute/
Frameworks were meant to help
But Frameworks tend to be prescriptive and option-limiting
And we’ve witnessed the rise of the Agile Industrial Complex

Of which, to be fair, we are all both clients and participants
But we really shouldn’t be surprised that there’s an Agile Industrial Complex.

After all, Agile is now the same “age” that Waterfall was the year Scrum was introduced.

1970: "Managing the development of large software systems" by Winston Royce
1995: Scrum introduced by Sutherland and Schwaber at OOPSLA 95
2019: Present day

DESPITE HIS WARNINGS ABOUT PURE WATERFALL
Is there a new Elephant in the Room?
Frameworks are Fragile, and subject to iatrogenics: harm from the healer

Can’t work with missing and removed sticks
They need to be fully implemented in order to derive the promised benefits.

Some individual practices provide benefits.

But the “engine” doesn’t really start till it’s all there.

Kneseck, Doug - Agile is Dead, and it Died in Infancy – Flexion Inc, Agile 2018
Which is close to impossible for most organizations – hence the mediocre results.
We’ve got to get out of this place.
In order to escape semantic diffusion, do we need to relinquish the word?

https://martinfowler.com/bliki/SemanticDiffusion.html

“Semantic diffusion occurs when you have a word that is coined a person or group, often with a pretty good definition, but then gets spread through the wider community in a way that weakens that definition. This weakening risks losing the definition entirely - and with it any usefulness to the term. (...) I see this semantic diffusion happening very publicly to two terms at the moment: 'agile' and 'Web2.0’” (2006)
Why not use Agile as a Springboard
Coined by Nassim Nicholas Taleb in his 2012 book "In Antifragile, Taleb stands uncertainty on its head, making it desirable, even necessary, and proposes that things be built in an antifragile manner."

(Quote from book amazon page)
To be merely robust is no longer enough.
The resilient resists shocks and stays the same
... The antifragile is beyond the resilient or robust.
Taleb’s extended disorder family

(1) uncertainty
(2) variability
(3) imperfect, incomplete knowledge
(4) chance
(5) chaos
(6) volatility
(7) disorder
(8) entropy
(9) time
(10) the unknown
(11) randomness
(12) turmoil
(13) stressor
(14) error
(15) dispersion of outcomes
(16) unknowledge
Escape from Method Prison and the iatrogenics of Frameworks

https://www.infoq.com/articles/escape-method-prson
Option enabling

“What” owned by the consumer and the “how” owned by the supplier are decoupled

Constraints on the means of achieving the consumer goals are lifted

Safety has been achieved
You actively pursue options across your boundaries and can affordably exercise them.

You eliminate options that cause complexity explosions.
Catalyst (+) Leadership

Medium Article - September 2018 - Jonathan Smart, on his experience leading a massive transformation at Barclay’s (+ 1,000 agile teams)

DA Case Study

https://medium.com/@jonathansmart1/organisational-agility-give-people-a-voice-5d5e68449aa7
The Disciplined Agile toolkit provides option-seeking guideposts ...
... Across the entire organization
Abstract Simple Rules
To address complexity anywhere in the organization

Focus where you are **fragile**

Increase the number of **independent options**

Reduce option **cost**

Quickly identify and **eliminate unfit** options

Reduce your people’s **exposure** to uncertainty

Increase people’s “**skin in the game**”
Experimentation
Toyota Kata / A3  Lean Change Method
Creating and exploiting inflexion points

It’s never too late to adopt an Antifragile Stance

Base image – Disciplined Agile  http://www.disciplinedagiledelivery.com/
Options you develop at your boundaries are actively shared with the enterprise, and you seek options from others in the enterprise.
An organization’s degree of antifragility is determined by how well it uses experiments and simple rules to generate and exercise options across the entire ecosystem.
Thank You

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Stock Images: Adobe Photostock

Scenes of former East Germany: © Ralph Gräf
https://www.graef-fotografie.de/index.html
The Antifragile Enterprise

turn downside into upside

Join

Typical agile transformations are fragile, seldom coming close to their potential. Achieve agility and beyond—the natural way.

Why?
Technology is increasing the volatility of our world faster than it can help us predict and control it. It only takes one surprise disruption to wipe out a fragile organization.

What?
"Antifragile" systems thrive on volatility and stress. They welcome volatility because they possess the options that their competitors lack to capitalize on unexpected events.

How
Nurture a bias-for-options using Option-Based Thinking and infuse option-generating behavior into your culture by applying Option Kata throughout the enterprise.

Option-Based Thinking

Increasing your options both reduces your exposure to uncertainty and increases your opportunity. Options reduce your risk and increase your upside. The option is an agent of antifragility. — N. N.

http://www.antifragileenterprise.org/
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<td>demarks-of-agile-organizations</td>
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Books

**The Toyota Kata**
Mike Rother

**The Toyota Kata Culture**
Mike Rother & Gene拷

**Drive**
Daniel H. Pink

**Skin in the Game**
Nassim Nicholas Taleb

**What Matters Now**
Gary Hamel

**The Art of Action**
Stephen Bungay

**Building Anti-Fragile Organisations**
Tony Bendell

**One Mission**
Chris Fussell with C. W. Goodyear

**Inviting Leadership**
Daniel Mezick & Mark Sheffield

**Simple Rules**
Donald Sull, Kathleen W. Eisenhardt

**Anti-Fragile ICT Systems**
Kjell Ivar Høie
QUESTIONS?

Please type your questions into the Q&A window
Real World Option Seeking
Travel Stories