

# **Lessons Learned From Five Years of Agile Implementation Failures**

or... What NOT to Do When Becoming Agile

by Devin B. Hedge / @agiledevin

AgileDC 2013  
October 8, 2013

**We are living in exponential times**

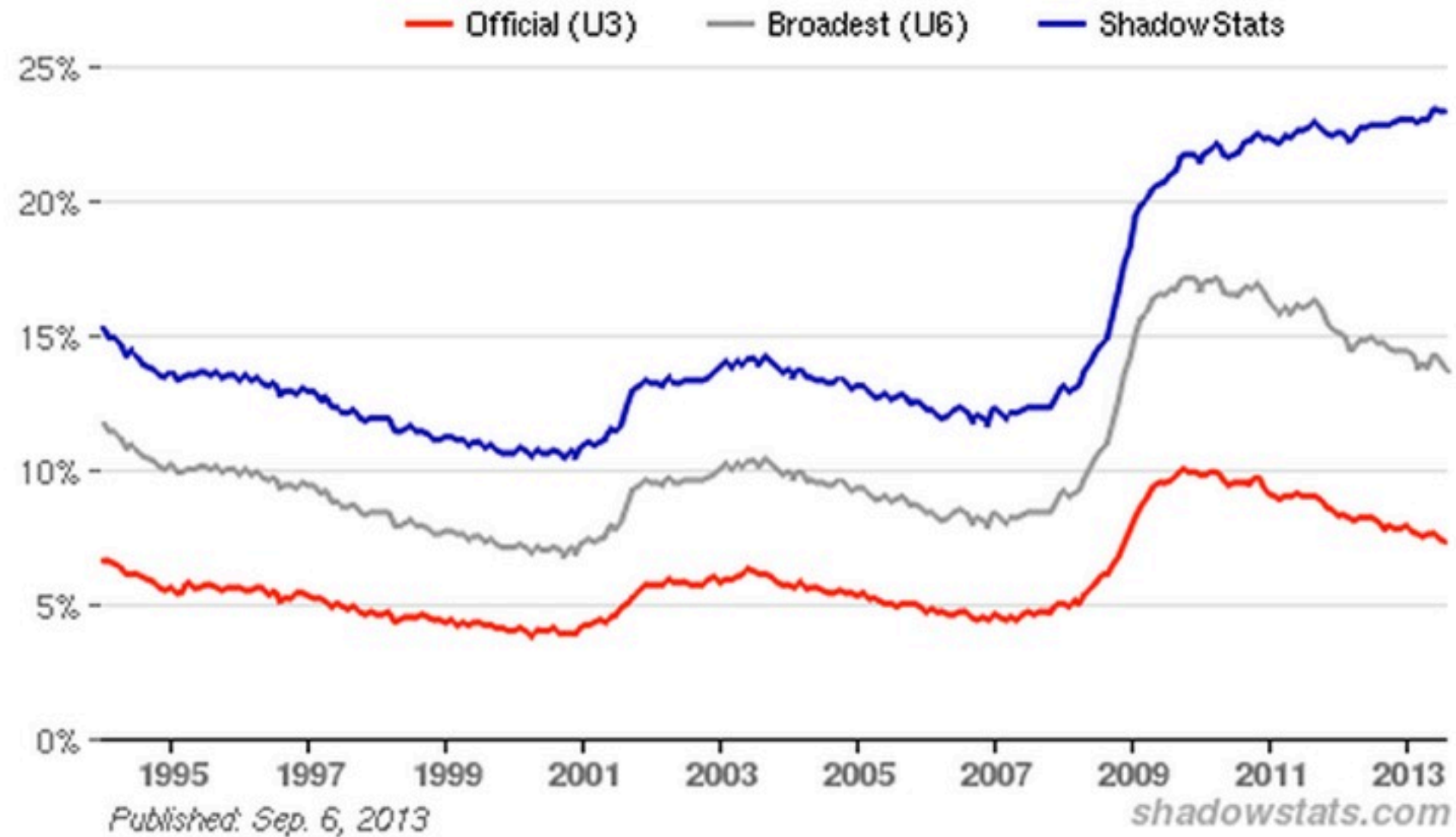
Did You Know 3.0 (Officially updated for 2012) HD

[https://www.youtube.com/watch?v=YmwwrGV\\_aiE](https://www.youtube.com/watch?v=YmwwrGV_aiE)



## Unemployment Rate - Official (U-3 & U-6) vs ShadowStats Alternate

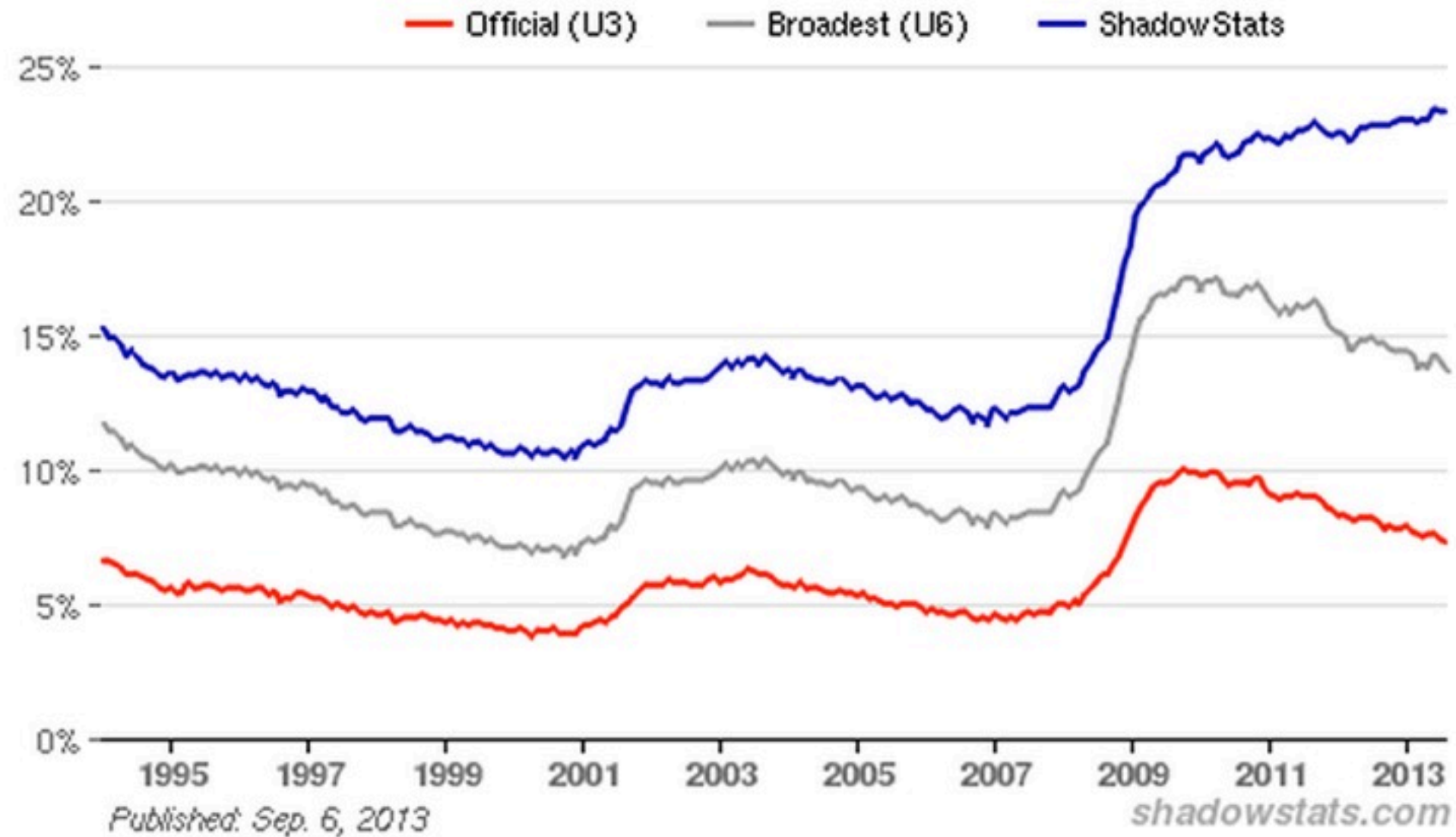
Monthly SA. Through Aug. 2013 (ShadowStats, BLS)



[http://www.shadowstats.com/alternate\\_data/unemployment-charts](http://www.shadowstats.com/alternate_data/unemployment-charts)

## Unemployment Rate - Official (U-3 & U-6) vs ShadowStats Alternate

Monthly SA. Through Aug. 2013 (ShadowStats, BLS)

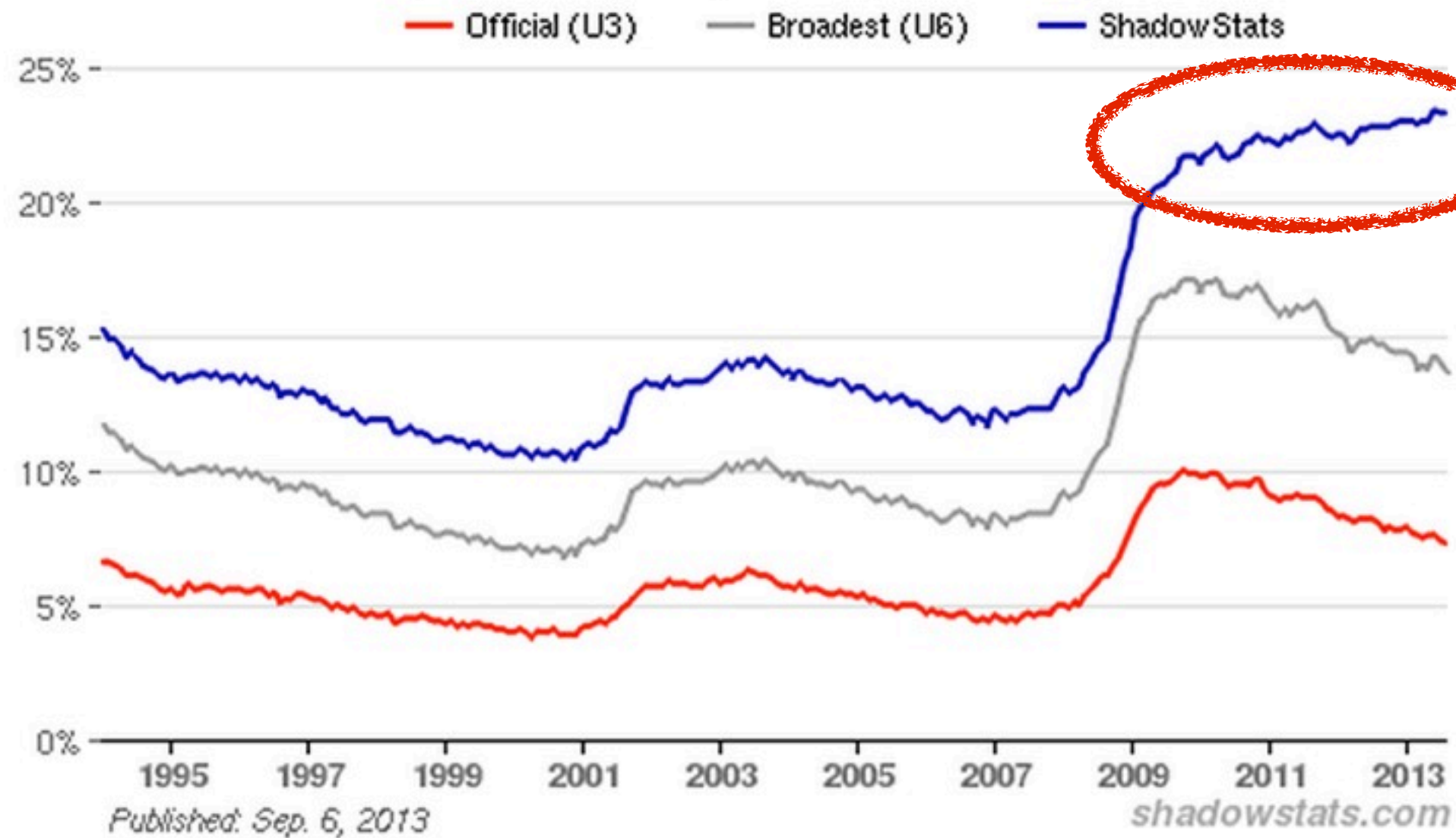


[http://www.shadowstats.com/alternate\\_data/unemployment-charts](http://www.shadowstats.com/alternate_data/unemployment-charts)



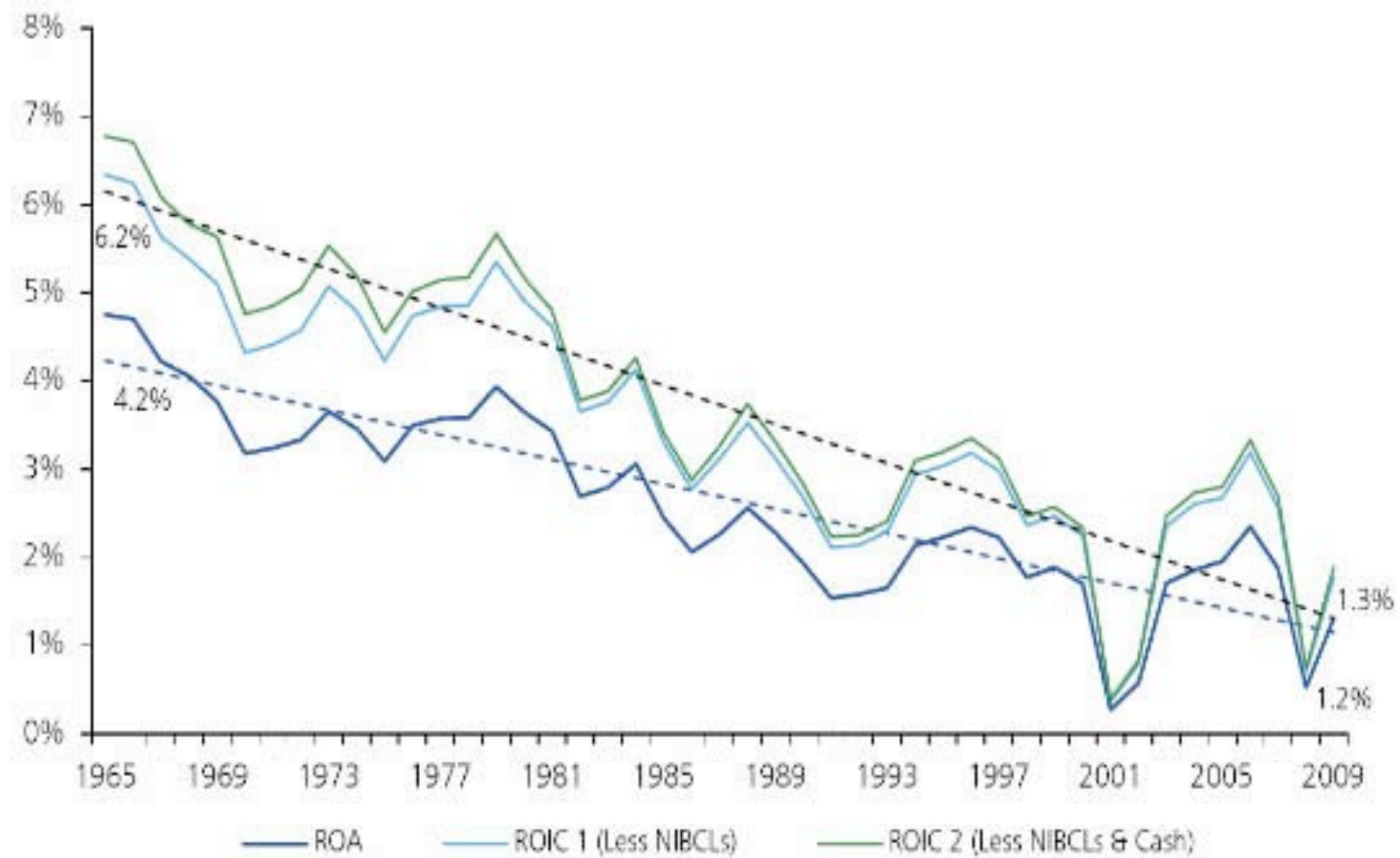
## Unemployment Rate - Official (U-3 & U-6) vs ShadowStats Alternate

Monthly SA. Through Aug. 2013 (ShadowStats, BLS)



[http://www.shadowstats.com/alternate\\_data/unemployment-charts](http://www.shadowstats.com/alternate_data/unemployment-charts)

Exhibit 6: Economy-wide Return on Invested Capital (ROIC) (1965-2009)

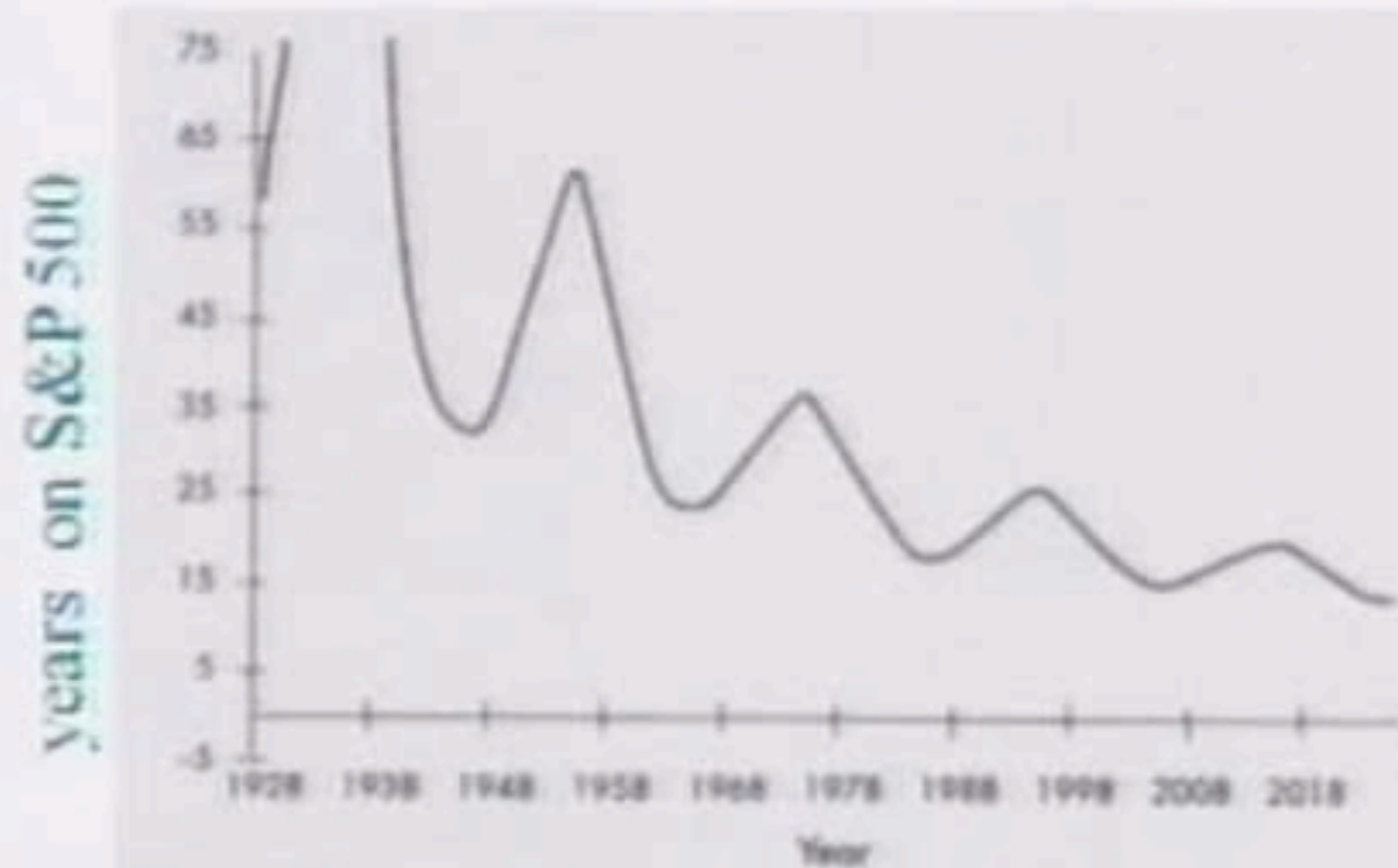


Source: Compustat, Deloitte analysis

Denning, S. (2011, October 19). The Big Shift or Shifty Statistics? Retrieved from <http://www.forbes.com/sites/stevedenning/2011/10/19/the-big-shift-or-shifty-statistics/>



## Average Lifetime of S&P 500 Companies



Source: Richard Foster: *Creative Destruction* (2001); Deloitte Center for the Edge

*I have the feeling that I am sitting at a campfire, late at night, and the embers are slowly going out. I can hear the sounds at the edge of the light, just beyond view, but I don't know what they are or what they mean.*

CEO of a Fortune 100 Global Corporation(i)

(i) Foster, R. N. (2001). *Creative destruction: why companies that are built to last underperform the market, and how to successfully transform them* (1st ed.). New York: Currency/Doubleday.



“If I can’t deliver new products to market every 12 weeks, this company won’t survive the ACA.”

CEO of Major Health Insurance Company

# We Live in Exponential Times



# We Live in Turbulent Times

# **Lessons Learned From Five Years of Agile Implementation Failures**

or... What NOT to Do When Becoming Agile

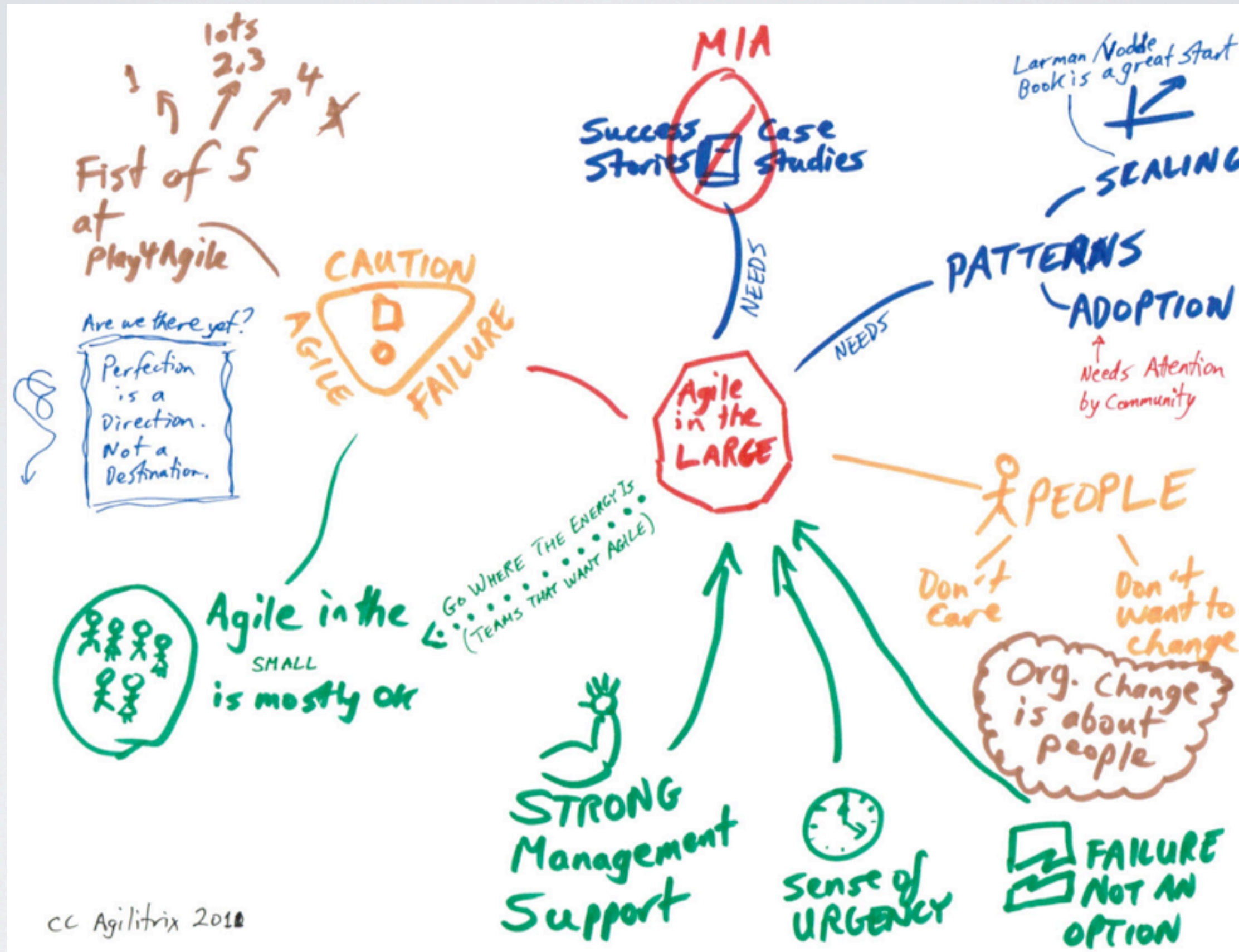
by Devin B. Hedge / @agiledevin



# WHY ARE YOU HERE?

Q: “WHAT DATA DO YOU HAVE ON  
SUCCESS VS. FAILURES OF AGILE”





Sahota, M. (2011, February 25). Shhh! Agile Failures (in the large). *Agilitrix Blog*. Corporate. Retrieved from <http://agilitrix.com/2011/02/agile-failures/>



A: “DEPENDS ON YOUR  
DEFINITION OF SUCCESS”



# AGENDA

What is Agile?

What is Success?

Three Common Failures

Five Preventative Steps

Q&A

# WHAT IS AGILE?



# AGILE IS...

## A Set of Values and Principles

# AGILE IS...

A Capability based on a Philosophy  
and a Set of Values That Enables Being  
Able to Survive, Thrive and Innovate in  
Changing Circumstances and Complex  
Environments



# AGILE IS...

A Capability based on a Philosophy  
and a Set of Values That Enables Being  
Able to Survive, Thrive and Innovate in  
Changing Circumstances and Complex  
Environments

# AGILE IS...

by implication, implemented at the...

... Corporate Level (Strategic)

... Operational Level

... Team Level

... Personal Level



# AGILE IS...

by implication, affects...

- ... C-Suite and Extended Leadership
- ... Finance
- ... Legal
- ... Personnel
- ... Portfolio and Program
- ... Product Marketing/Sales/Fulfillment
- ... oh... and IT, too. 😊



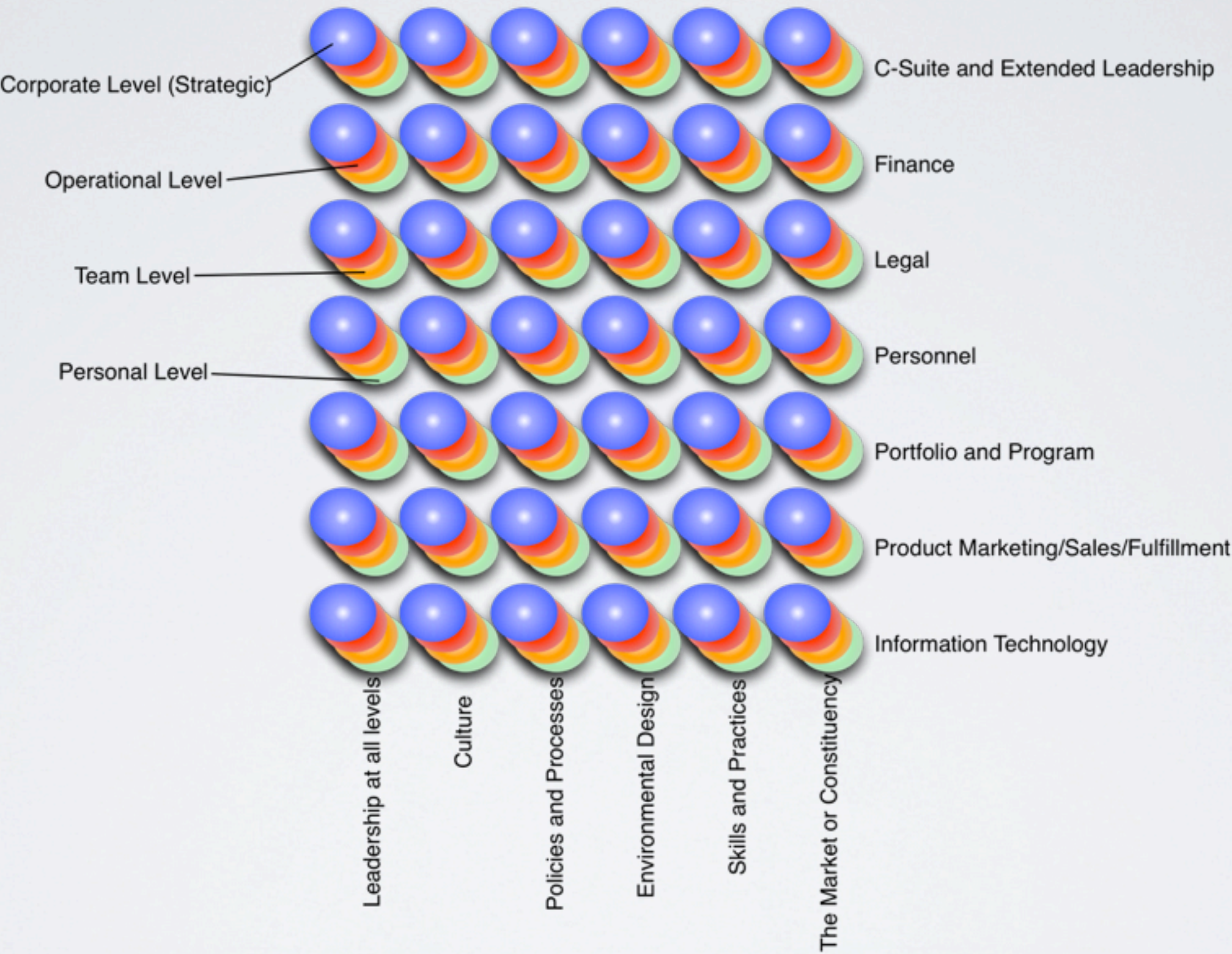
# AGILE IS...

by this new definition defined by...

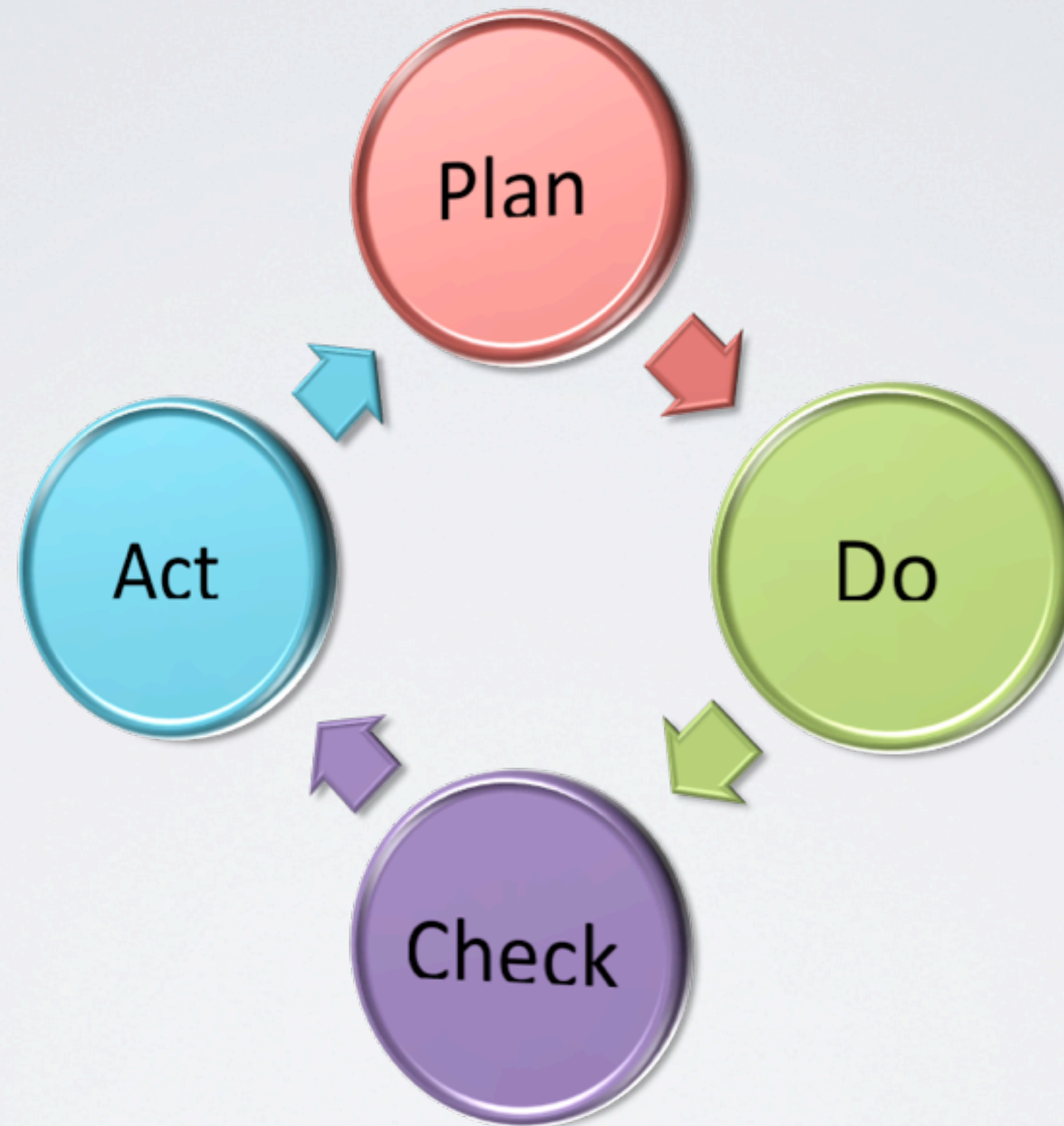
- ... Leadership at all levels
- ... Culture
- ... Policies and Processes
- ... Environmental Design
- ... Skills and Practices
- ... The Market or Constituency



# Complex View of Organizational Agility

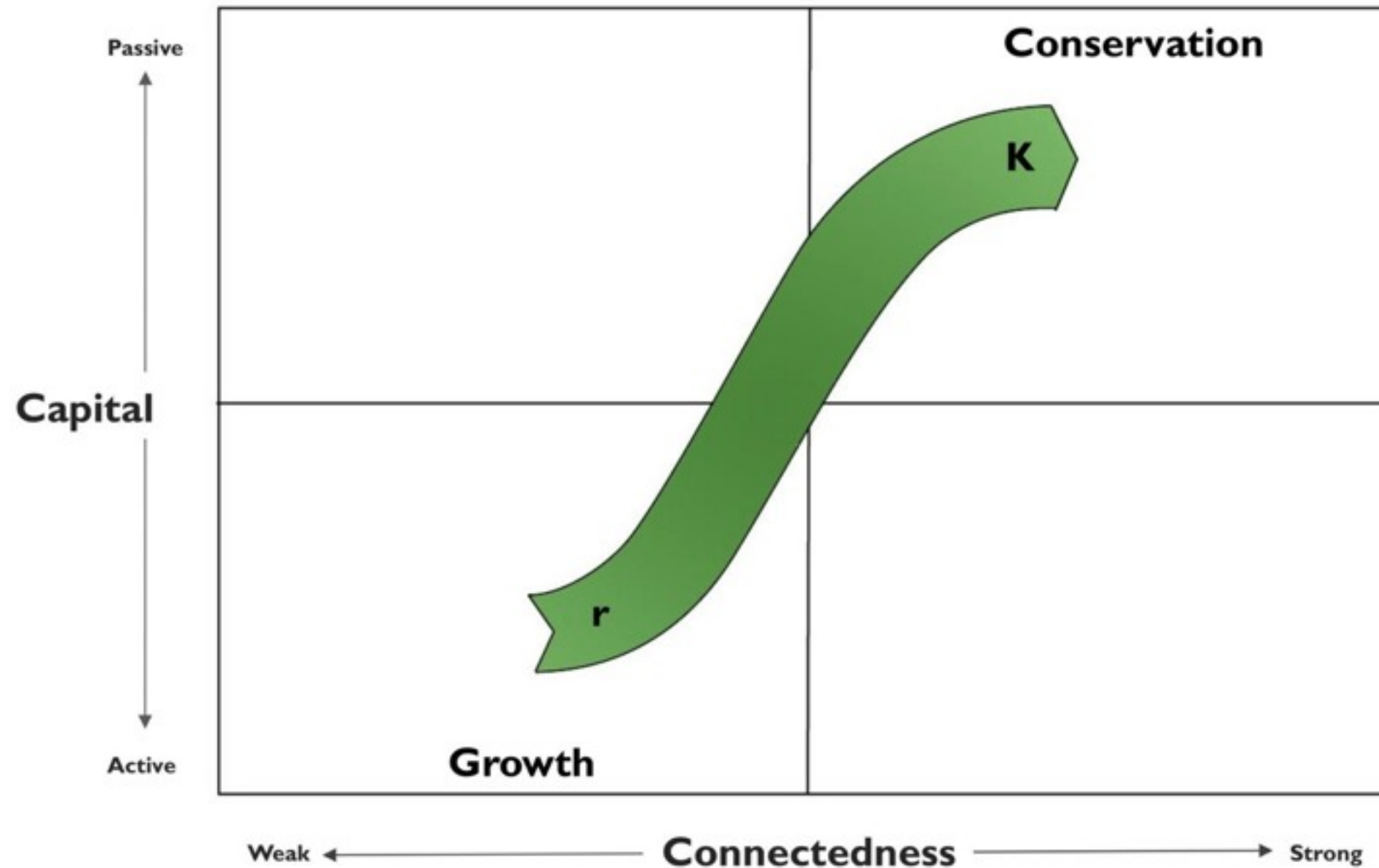






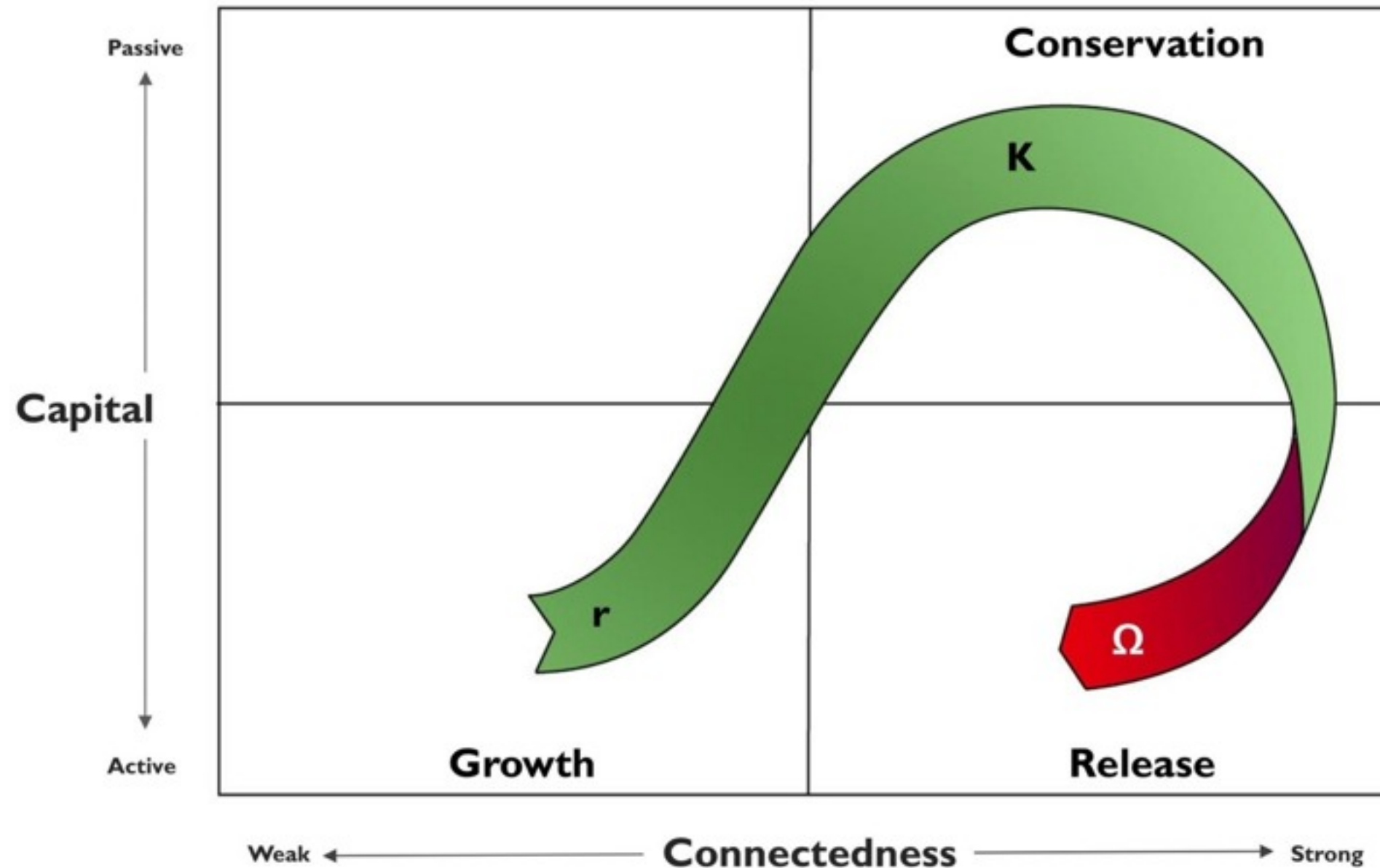


# Cycle of adaptive change



Source: Holling, 1987

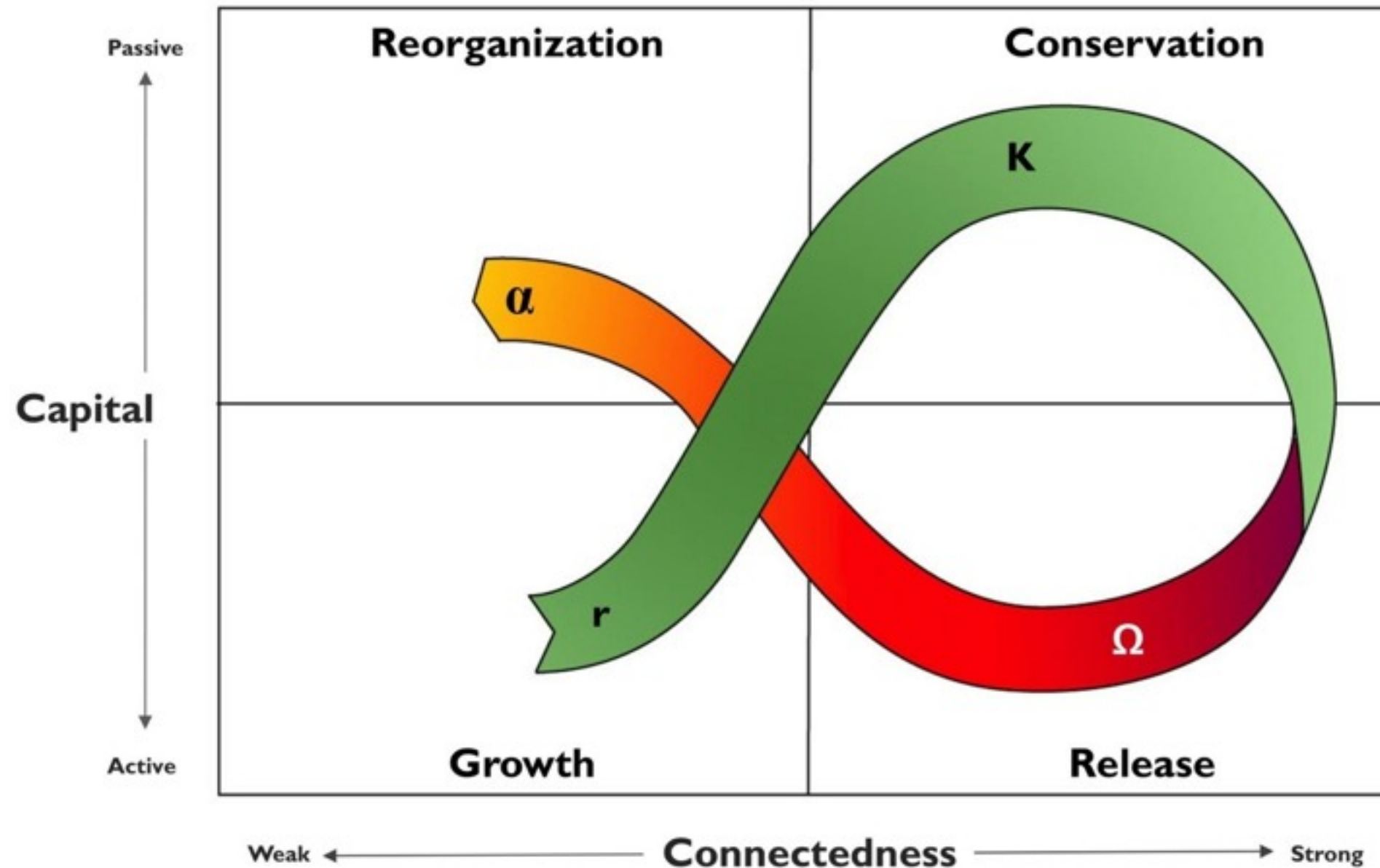
# Cycle of adaptive change



Source: Holling, 1987

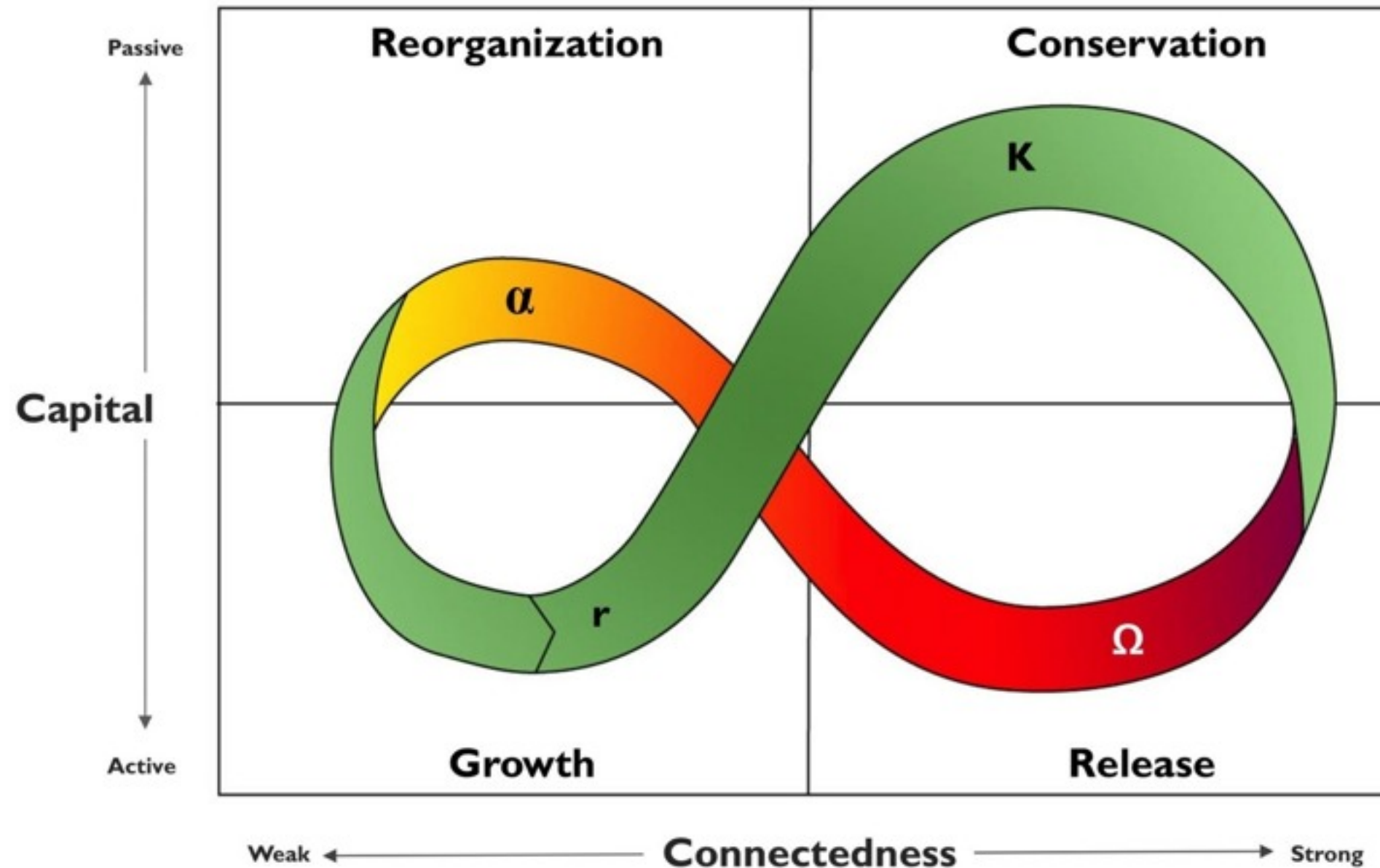


# Cycle of adaptive change



Source: Holling, 1987

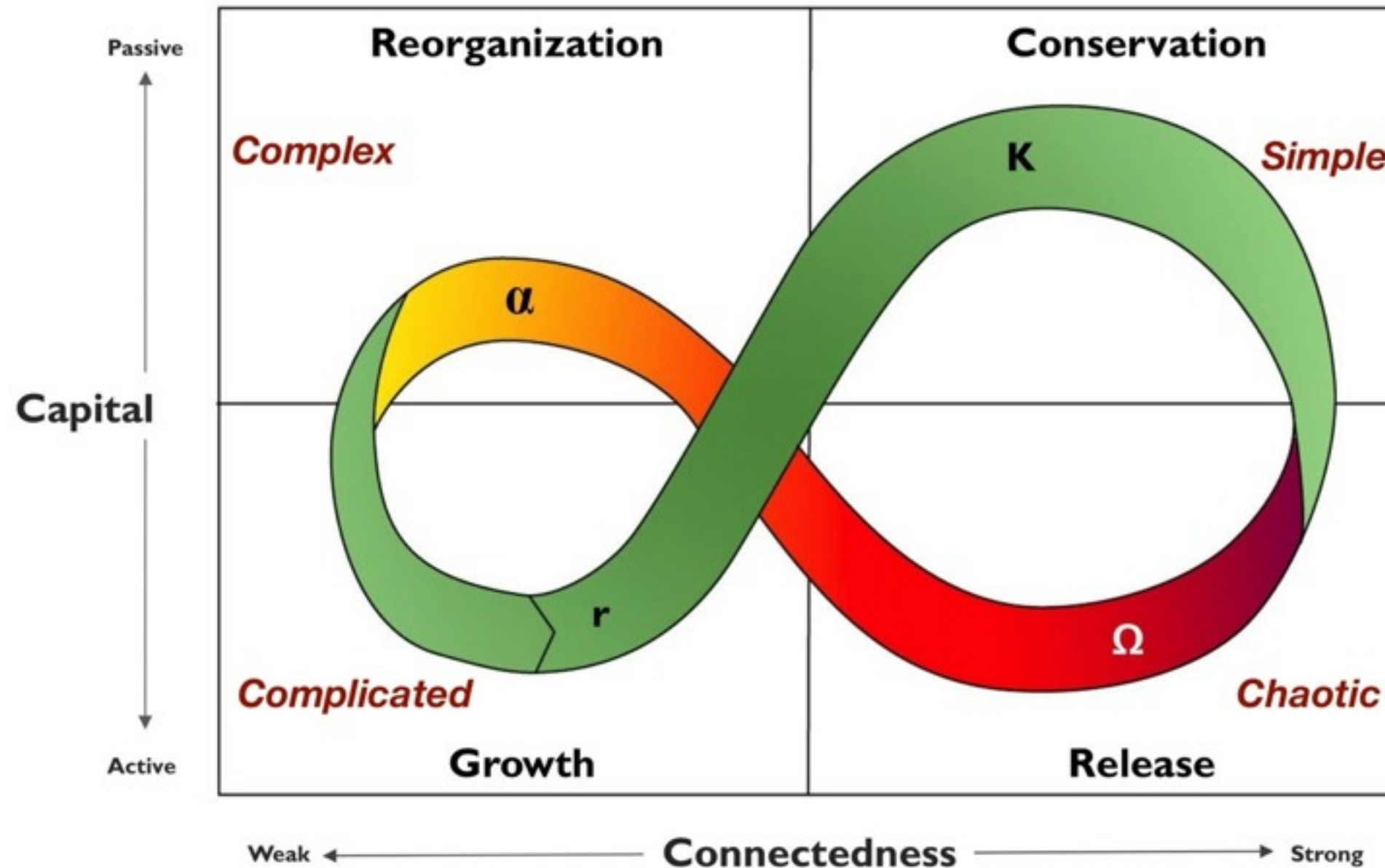
# Cycle of adaptive change



Source: Holling, 1987

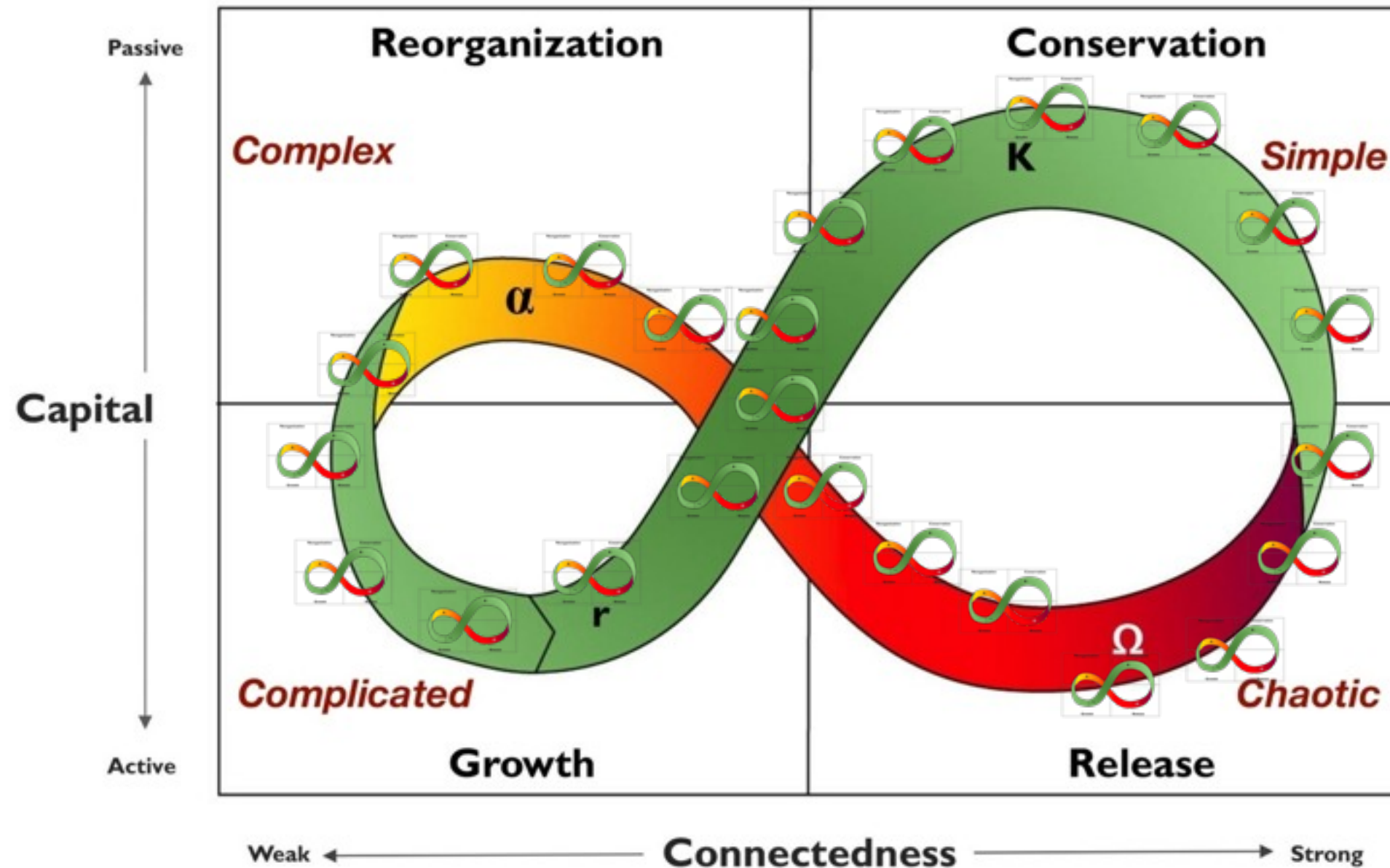


# Cycle of adaptive change



Source: Holling, 1987

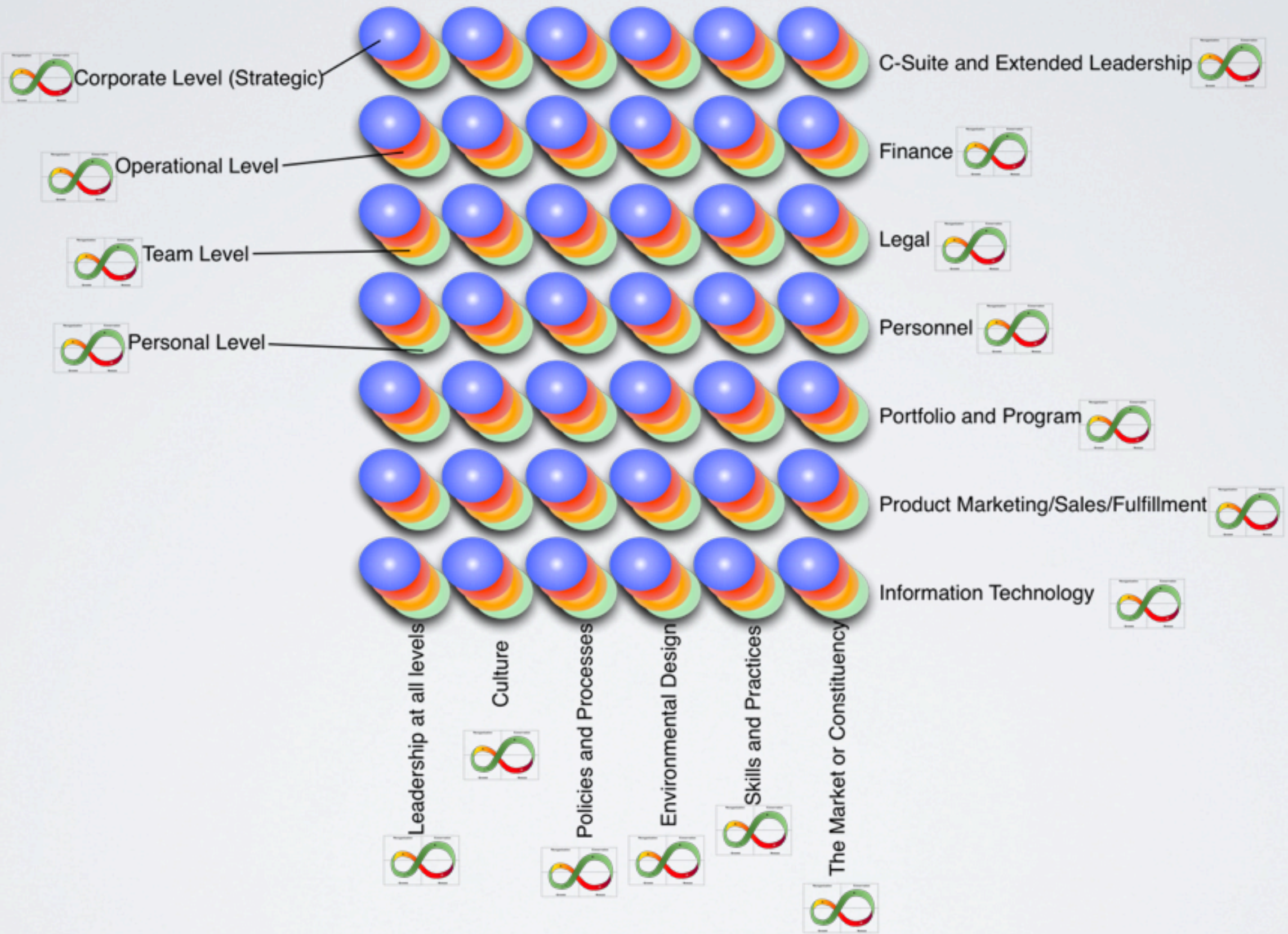
# Cycle of adaptive change



Source: Holling, 1987

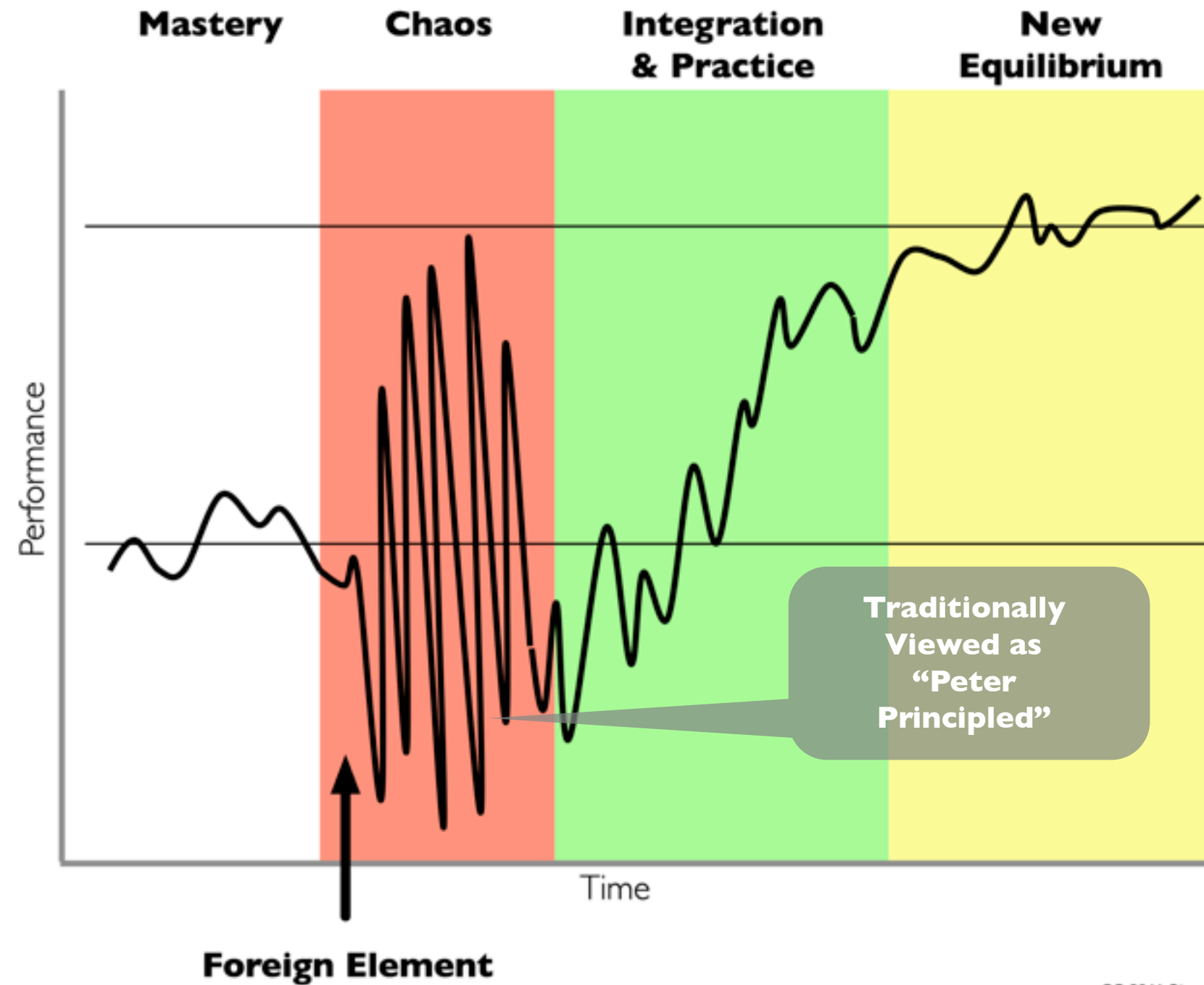


# Complex View of Organizational Agility





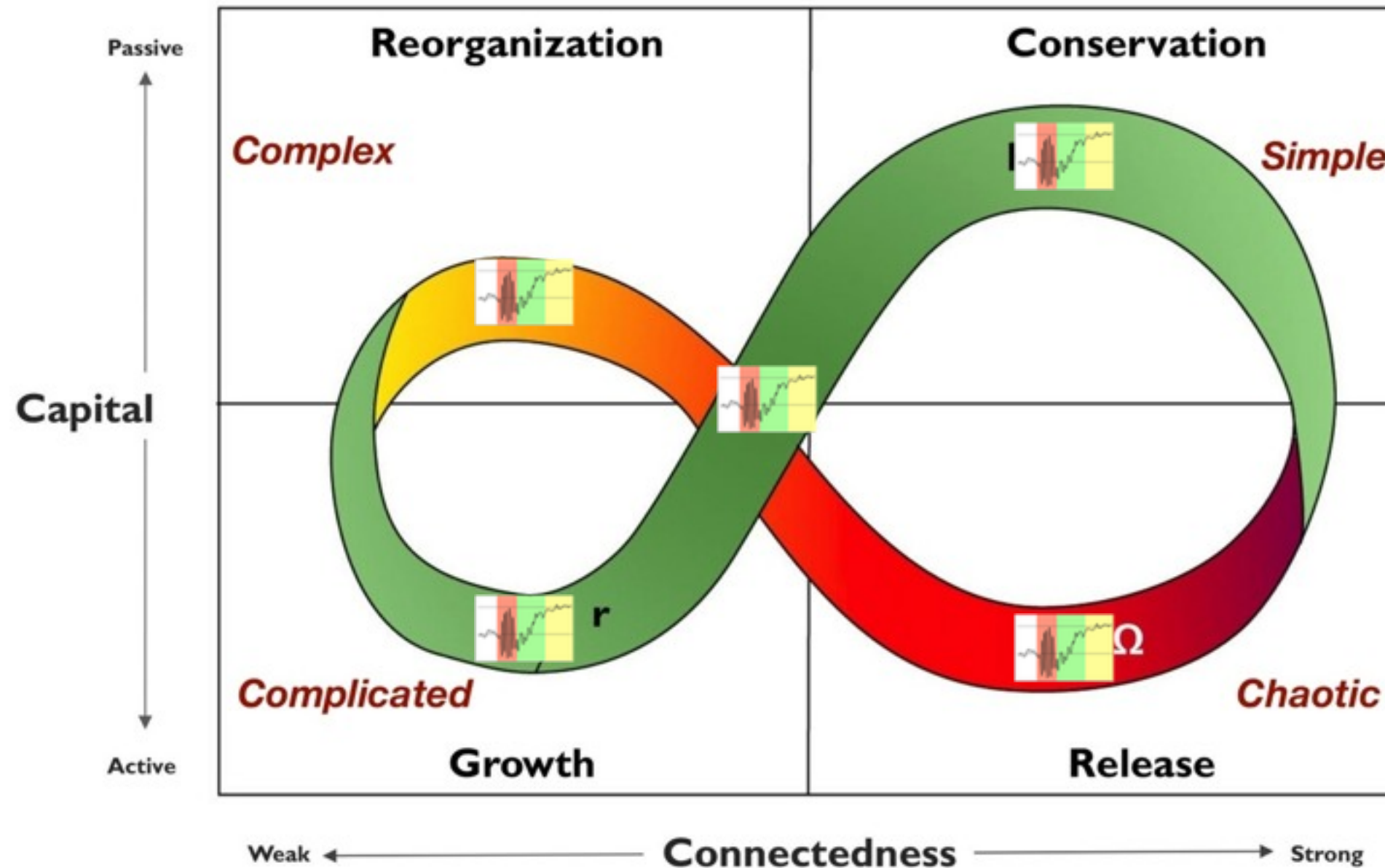
# Cycle of Mastery



CC 2011 Stuart Scott  
Based on the work of Virginia Satir

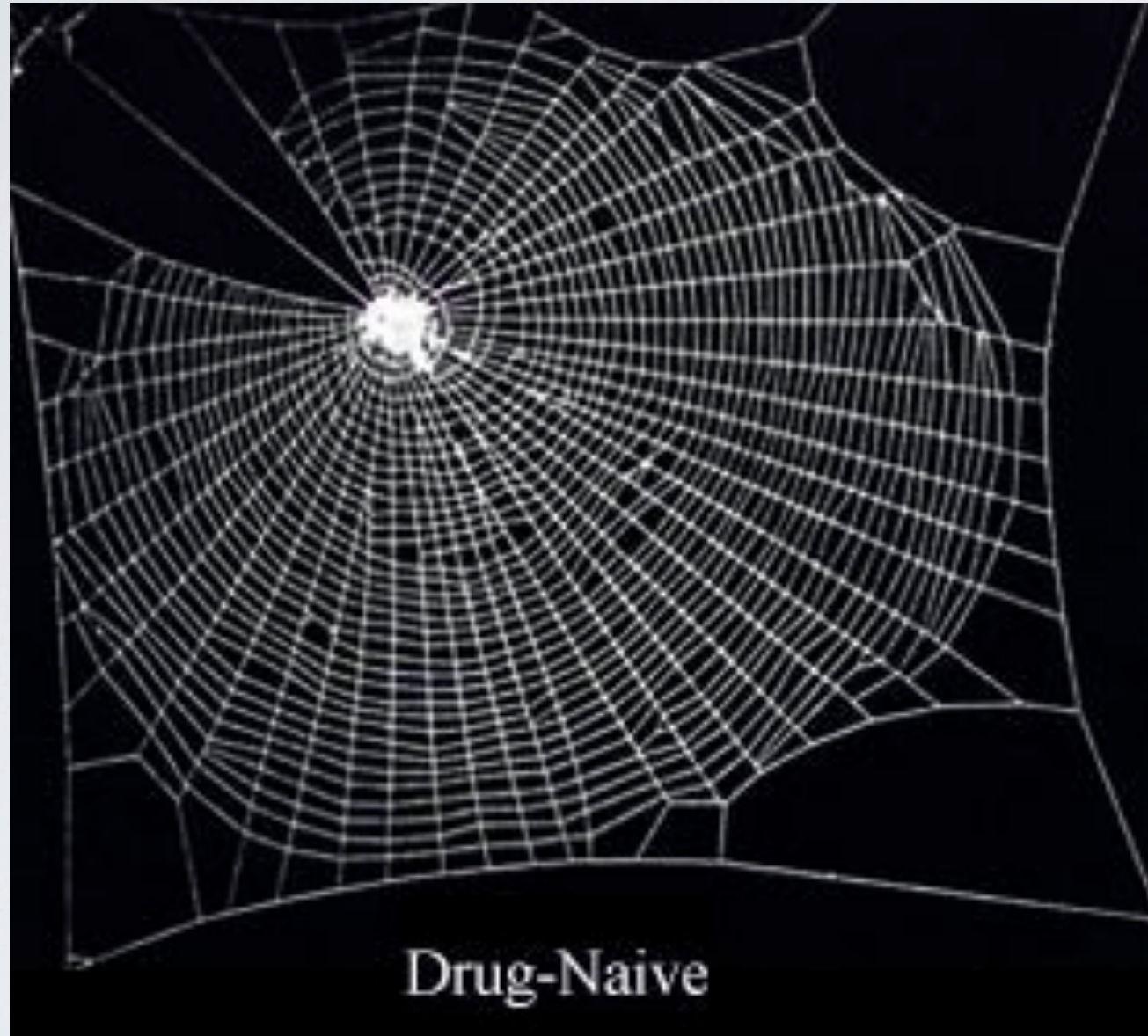


# Cycle of adaptive change



Source: Holling, 1987





Drug-Naive



Caffeinated



WAS THIS WHAT YOU SIGNED UP TO?

# IS IT ANY WONDER WHY AGILITY IS HARD TO ADOPT?

- It isn't a process implementation or improvement
- Requires higher-order thinking
- Requires holistic organizational change instead of local optimization (e.g. IT )
- It is near impossible for our brains to understand what to change and what to change to (i.e. Why Big Data and BI is Important)





# WHAT IS TRANSFORMATION?

Probably NOT becoming Agile



# WHAT IS SUCCESS?



WHAT IS SUCCESS WHEN THE GOAL IS  
CONSTANTLY MOVING?



**SEAHAWKS**



WHAT IS SUCCESS WHEN THE GOAL IS  
CONSTANTLY MOVING?





# WHAT IS SUCCESS WHEN THE GOAL IS CONSTANTLY MOVING?





# WHAT IS SUCCESS WHEN THE GOAL IS CONSTANTLY MOVING?





# WHAT IS SUCCESS WHEN THE GOAL IS CONSTANTLY MOVING?

Provided we even know  
what the goal is.

HOW WE DEAL WITH FAILURE IS **MORE**  
**IMPORTANT** THAN SUCCESS



# THREE COMMON FAILURES

“Immeasurable Agility”

“Oh... That’s Outside Our Control”

“I Shall Re-Define Agile In My Own Image”

“I don’t know and I don’t care!”



“IMMEASURABLE AGILITY”



# THE NORMAL BUSINESS METRICS

Revenue

Efficiency

Costs

Quality

Net Revenue

Customer Satisfaction

Profit/Loss

Derivatives of The Balanced Scorecard

Headcount



# THE BALANCED SCORECARD



Your ability to reinvent yourself is your strategic differentiator, both your business model and in your personal career



# THE NORMAL IT METRICS

Scope (Management)

Schedule (Compliance)

Budget (Cutting)

Quality (Defect Counts/Defect Rate)

Resources

***(PLEASE STOP USING THIS WORD TO TALK ABOUT PEOPLE!)***

Risk (rarely looks at opportunity)

“Sophistry is only fit to make men more conceited in their ignorance.” (John Locke)

Pre-9/11 vs. Post-9/11

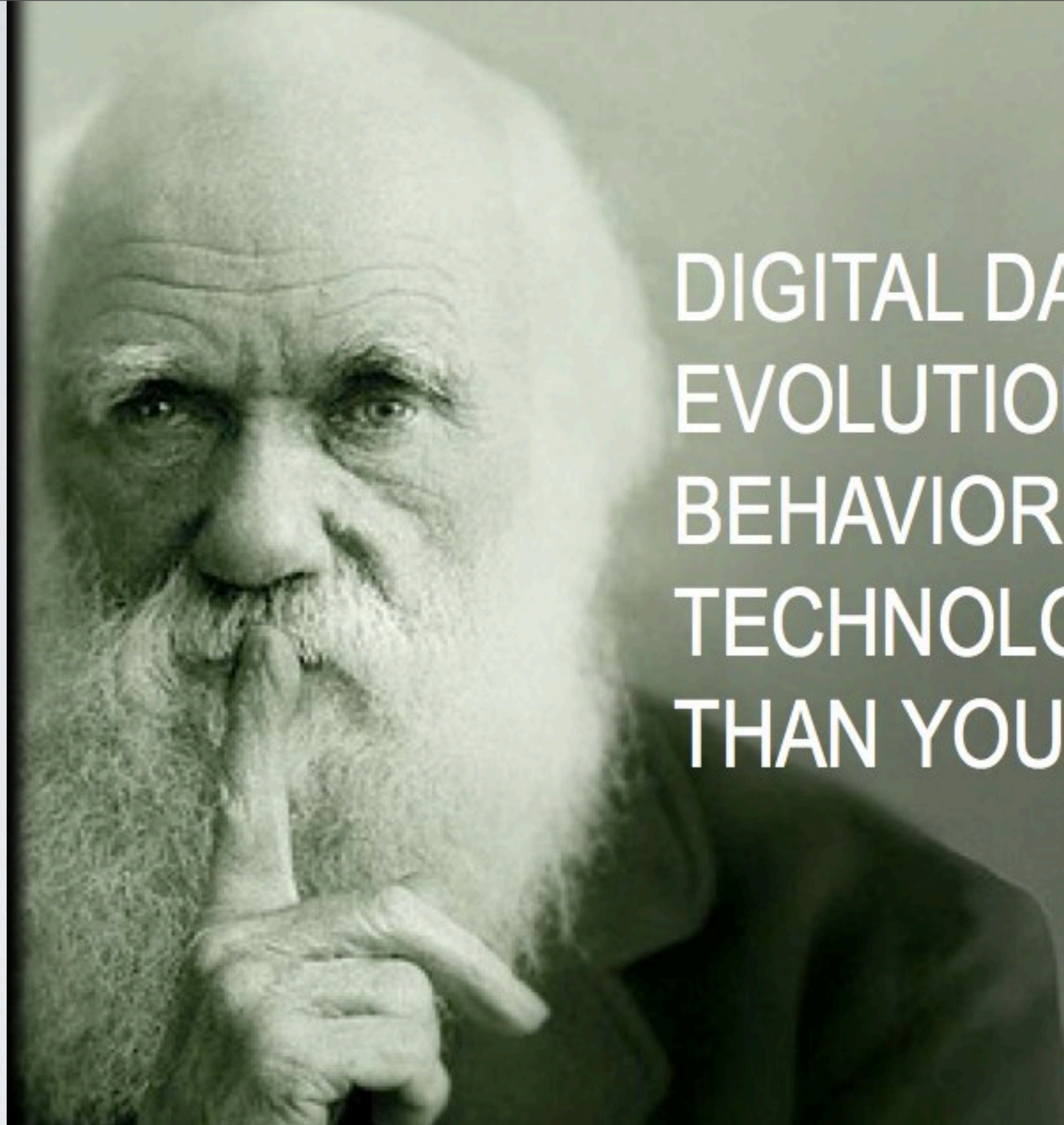
Blackberry

**TRUSTING METRICS THAT  
FOCUSES ON AN END STATE IN  
A DYNAMIC, COMPLEX SYSTEM  
IS SOPHISTRY!**

Motorola

Too Big To Fail?





DIGITAL DARWINISM IS THE  
EVOLUTION OF CONSUMER  
BEHAVIOR WHEN SOCIETY &  
TECHNOLOGY EVOLVE FASTER  
THAN YOUR ABILITY TO ADAPT



Measure	Measure Description	Performance Category	Frequency	Audience	Guideline
Solution Delivery Index (SDI)	Indexed measure based on the average of Delivery Timeliness, Business Partner Satisfaction, Solution Quality, and Application Availability	Multiple	Monthly	Sr Mgmt, DLs, SPMs, PMs, PDMs	Can be reported if Solution Quality/proj DRE is reported
Implementations On Time (IOT)	% of projects implemented on time vs. total implemented	Timeliness	Monthly	Sr Mgmt, DLs, SPMs, PMs, PDMs	OK to keep active
Business Partner Satisfaction (BP Sat)	Average score on a 10 question customer satisfaction survey expressed as % score on a 4 point scale. Survey completed shortly after project delivery.	Satisfaction	Monthly	Sr Mgmt, DLs, SPMs, PMs, PDMs	Keep. Revisiting for both Agile and Waterfall as part of Solution Quality Workgroup
Solution Quality (SQ)	% of defects and findings submitted before implementation vs. total defects and findings.	Quality	Monthly	Sr Mgmt, DLs, SPMs, PMs, PDMs	Can be reported with lower target than waterfall projects, picking up only the defects carried between sprints or post production
Post Imp Sev 1 Defs	Number of Sev 1 defects submitted within 45 days of implementation	Quality	Monthly	DLs, SPMs, PMs, PDMs	OK to keep active
Post Imp Sev 2 Defs	Number of Sev 2 defects submitted within 45 days of implementation	Quality	Monthly	DLs, SPMs, PMs, PDMs	OK to keep active
Defect Removal Efficiency	Number of findings and defects found pre-implementation for projects and SRs over the past 12 months as a % of findings and defects found in total over the past 12 months.	Quality	Monthly	DLs, SPMs, PMs	Can be reported separate from and with lower target than waterfall projects, picking up only the defects carried between sprints or post production
Project Effectiveness	Project Defect Removal Efficiency [Quality] X Project Function Points per Person Year [Productivity] for projects completed over the past 12 months.	Multiple	Monthly	DLs, SPMs, PMs	Can be reported with lower target than waterfall projects, picking up only the defects carried between sprints or post production
Aggregate Actual to Budget Variance within +/- 10%	Total Actual costs at completion as a % of total marked budget costs at completion for all projects completed YTD.	Financial	Monthly	DLs, SPMs, PDMs	Keep but need to determine when to capture Budget value from Planview (Phase 4 Baseline today is the trigger for waterfall)
Project Actual to Budget Variance	Total # of projects completed with actual costs falling within +/- 10% of marked budget cost expressed as a % of all projects completed.	Financial	Monthly	DLs, SPMs, PMs, PDMs	Keep but need to determine when to capture Budget value from Planview (Phase 4 Baseline today is the trigger for waterfall)
Resource Forecasting Accuracy	Average variance of actual monthly project effort from monthly project effort forecasts YTD. Variance is expressed as a % of the monthly forecast.	Financial	Monthly	DLs, SPMs, PMs, PDMs	OK to keep active
Resource Forecasting Accuracy - Individual	Average variance of actual monthly effort by individual resource from monthly resource effort allocations (forecasts) YTD. Variance is expressed as a % of the	Financial	Monthly	PMs, PDMs	Potential Sunset
Phase 2 / Phase 4 Estimation Accuracy	Aggregate variance of project phase 4 estimated budget costs as a % of approved phase 2 budget costs. Aggregate variance is based on the absolute values of	Financial	Monthly	DLs, SPMs, PMs	Potential Sunset
CPI - Cost Performance Index	Industry standard in-flight cost measure based on the relationship between earned effort value and actual effort expended to date. CPI is expressed as earned effort	Financial	Weekly	DLs, SPMs, PMs, PDMs	Not sure if of value. If keep but need to determine when to capture Budget value from Planview (Phase 4 Baseline today is the
SPI - Schedule Performance Index	Industry standard in-flight timelines measure based on the relationship between earned effort value and planned effort to date. SPI is expressed as earned effort value /	Timeliness	Weekly	DLs, SPMs, PMs, PDMs	Not sure if of value. If keep but need to determine when to capture Budget value from Planview (Phase 4 Baseline today is the
Cost per FP	Dollar cost per Function Point delivered for projects completed over the past 12 months.	Financial	Monthly	DLs, SPMs	Keep for Experienced Based Costing
Productivity - FP per Person Year (Delivery Rate)	Function Points delivered per total person years of effort expended for projects completed over the past 12 months.	Efficiency	Monthly	ITSO Management	Potential Sunset - all delivery approaches
AIS Resource Utilization	Billable actual resource effort as a % of total available resource effort (including PTO).	Efficiency	Monthly	DLs, SPMs, PDMs	OK to keep active



# HOW TO KILL A COMPANY



# RULE OF THUMB

**Measure outcomes, not activity.**

Example: I don't track tasks or task hours,  
because it doesn't measure outcomes



# THE NEW BUSINESS METRICS

YOUR ABILITY TO STAY LEAN	YOUR ABILITY TO ADAPT
Number of Product Releases per Year (26-52 is good)	
ROI per Product Feature	Pirate Metrics Activation, Retention (happiness), Revenue (sustainability), Acquisition, Referral (virality)
Cost per Story Point (using a Gaussian curve)	
	Conversion rate of Horizon 2 to Horizon 1
	Conversion rate of Horizon 3 to Horizon 2





# THREE HORIZONS

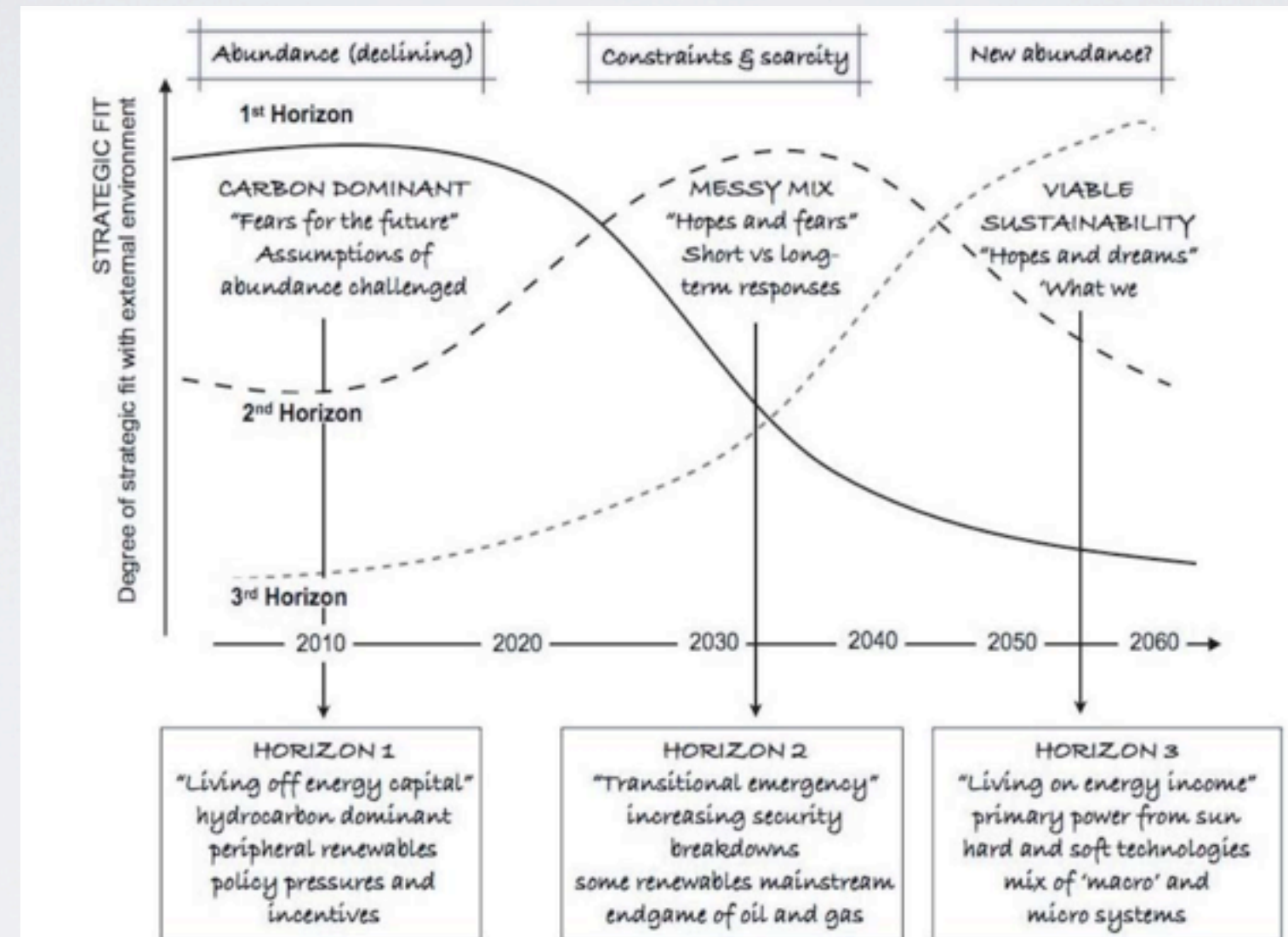


Figure 3. Three Horizons and energy security

Note. Adapted from "Energy Security and Climate Change", by Bill Sharpe, Anthony Hodgson, & Ian Page. Discussion Paper, International Futures Forum, 2006, Aberdour.



# THE NEW IT METRICS

Avg. Lead Time per Product Feature	Cycle Time per Product Feature	% <u>Automated</u> * Acceptance Tests
% <u>Automated</u> * Unit Tests	% Automated Compiles per Day	Happiness of each Feature Team
Running Tested Features	Code complexity (McCabe's Cyclomatic Code Complexity)	% <u>Automated</u> * Tests relative to Complex (aka. Risky) Code



\*Automated = requires NO human interaction, not even to start the test



# DAVE NICOLETTE'S LIST

See Dave Nicolette's Agile Metrics v6 Presentation



# IMPLEMENTING THE NEW METRICS

- Don't dump the old metrics just because I say so or some Agile Coach says so...
- Keep them around for Nine Months and see what happens
- Don't force Agile adopters to be "compliant" to standard operating parameters for existing metrics
- Take a “dip-stick check” every 2-4 weeks (iteration end, or if Kanban just watch the dial and stay out of the way).
- You will either see no change, or
- You will see significant change but causation will be difficult to determine



“OH... THAT’S OUTSIDE OUR CONTROL”



# WRONG SCOPE OF ADOPTION EFFORT





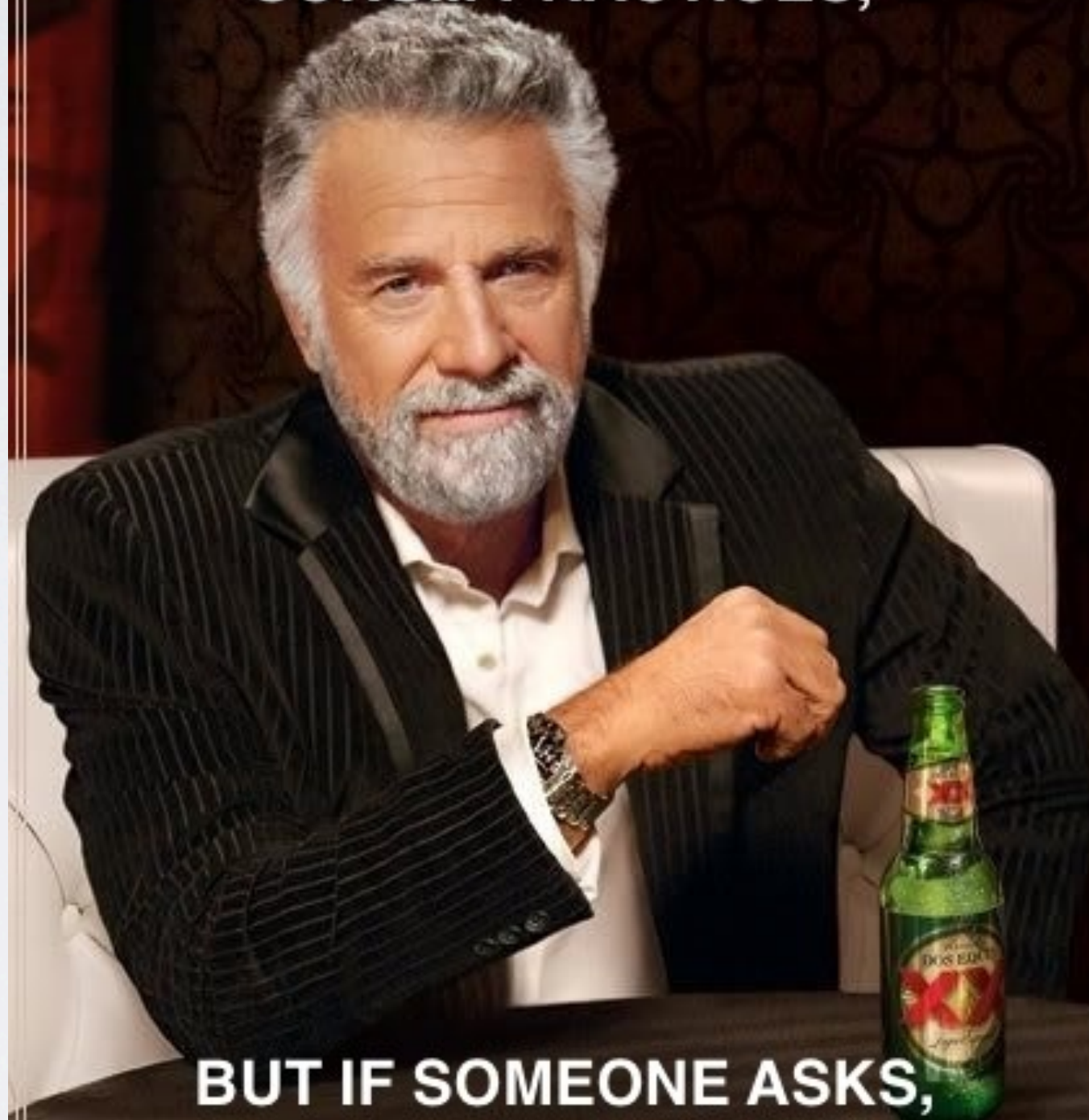
“I SHALL RE-DEFINE AGILE  
IN MY OWN IMAGE”







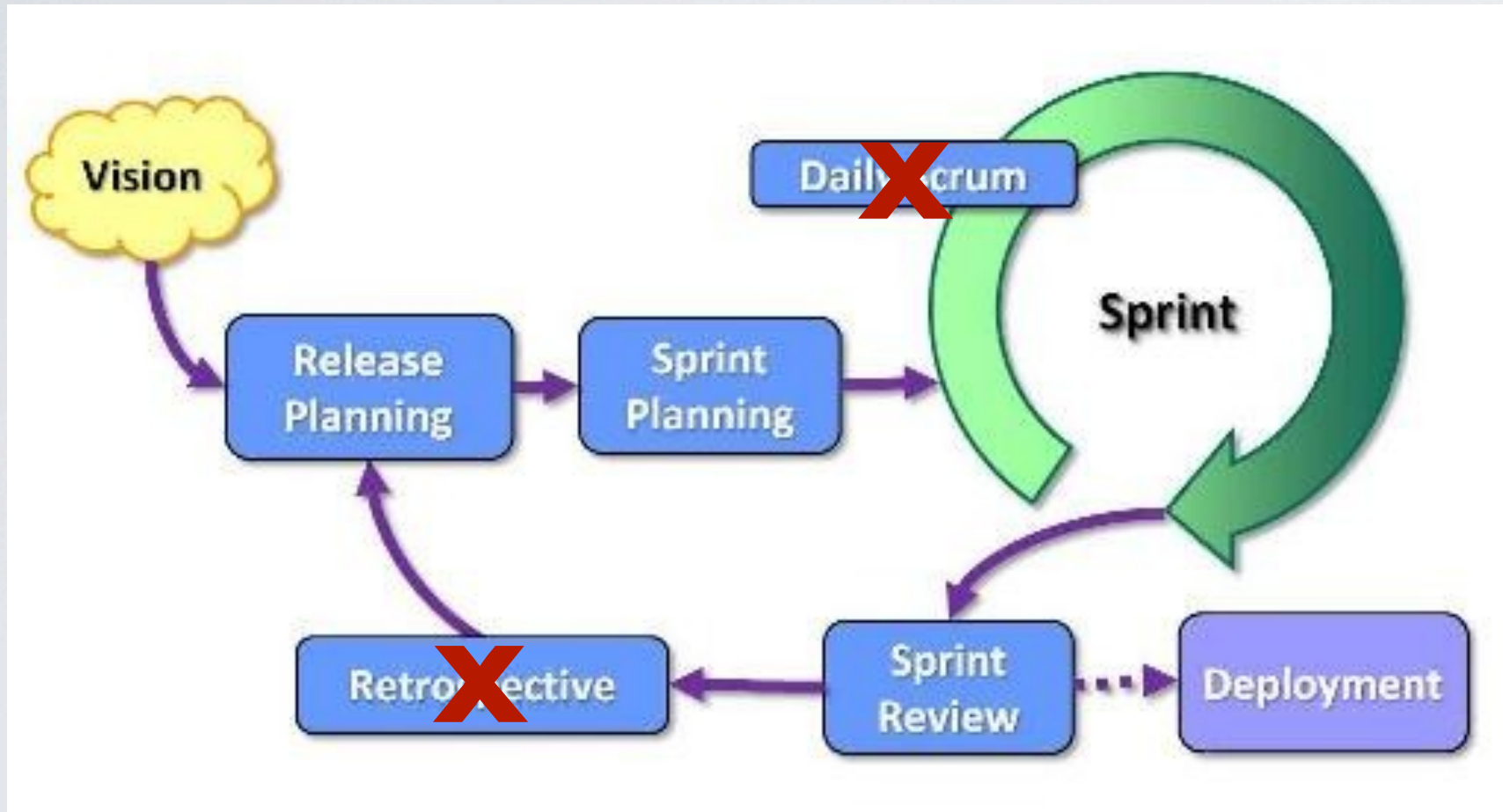
**I DON'T ALWAYS USE THE  
SCRUM PRACTICES,**



**BUT IF SOMEONE ASKS,  
I'LL TELL THEM WE'RE AGILE!**



# SERIOUSLY?



=





# WE GOT 5% IMPROVEMENT!!!









# FIVE PREVENTATIVE STEPS



# STEP ONE

## Get the Right People Involved

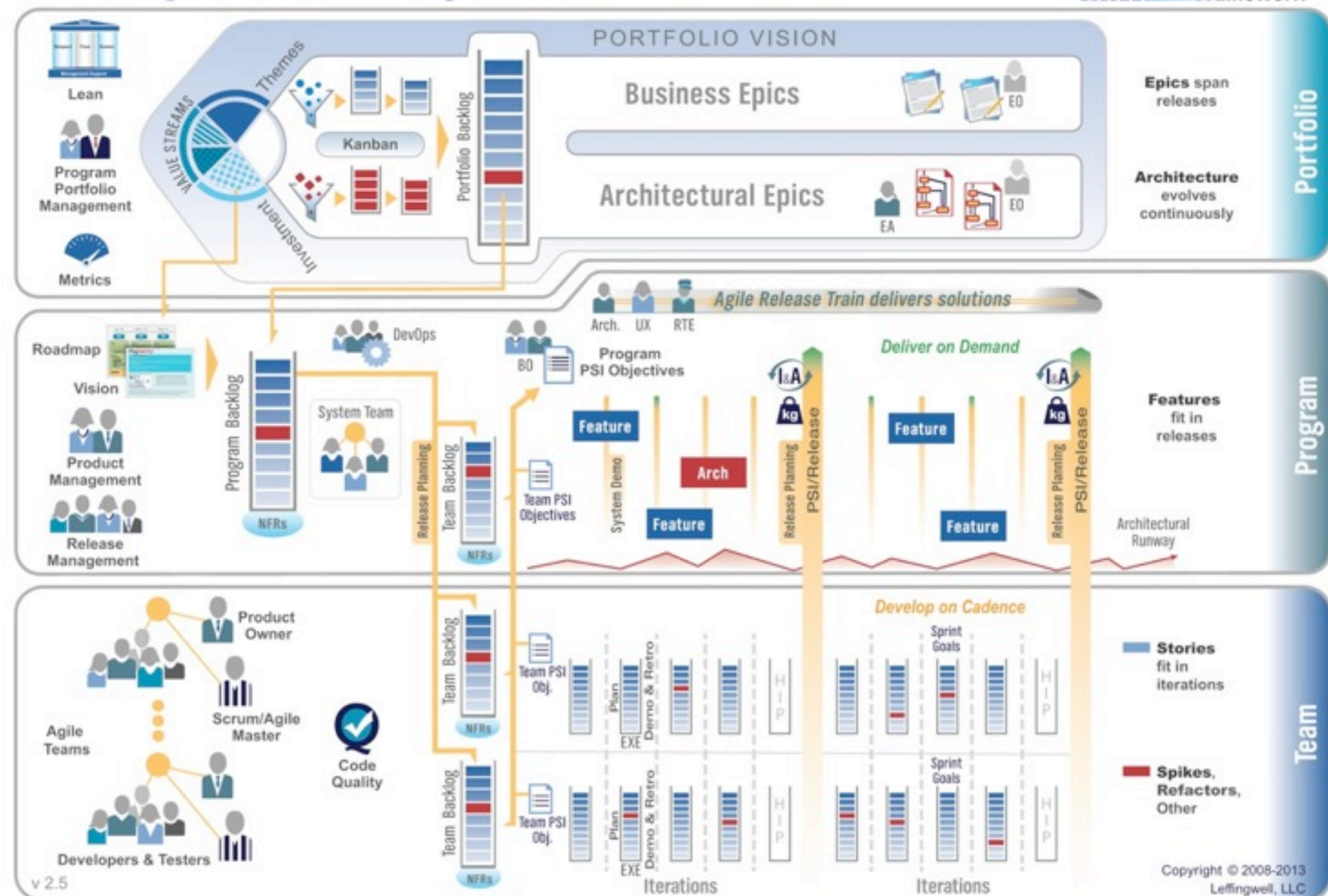
Adoption team:



Senior Executive Sponsor  
Champion  
HR  
CorpFin  
Legal  
PPO/PMO  
Marketing/Product Dev  
Public Relations  
Info Tech

**STOP THINKING IT ONLY!**

### Scaled Agile Framework® Big Picture







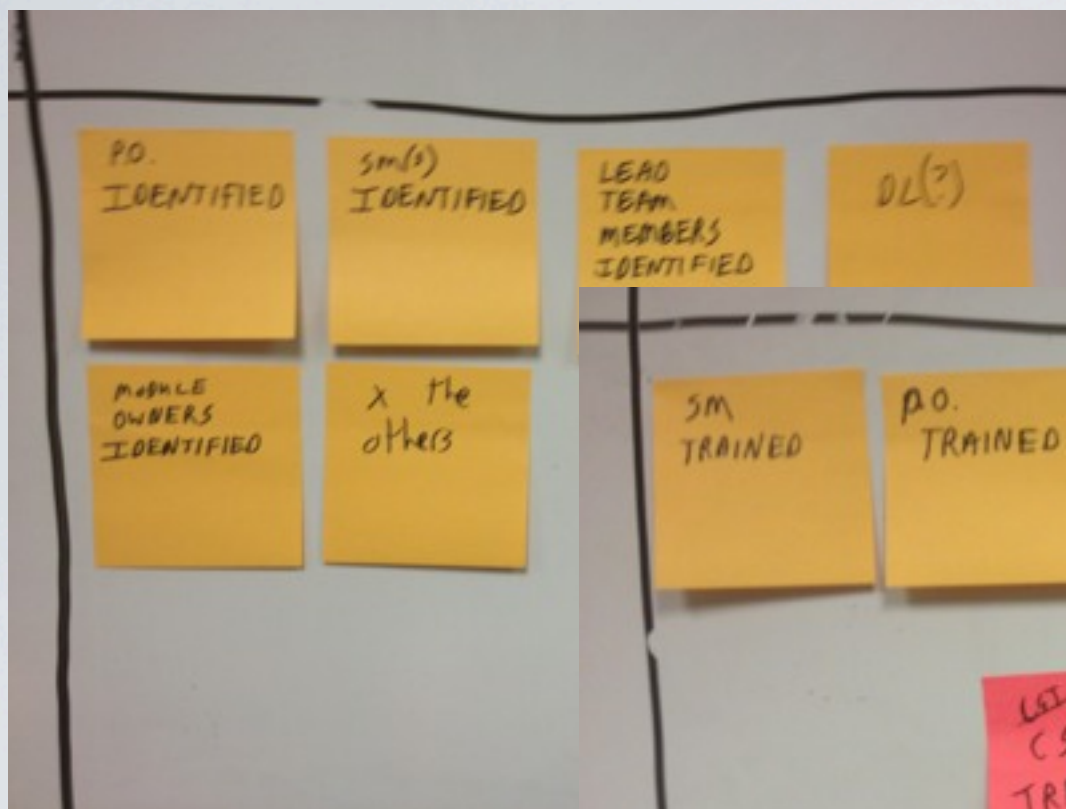
Use the Right Metrics to  
Navigate Continuous Change

STEP TWO





# STEP THREE



Create A Coaching Plan For  
Everything Important



## Lean Six Sigma: 8 Wastes



### Talent

Underutilizing people's talents, skills, & knowledge.



### Inventory

Excess products and materials not being processed.



### Motion

Unnecessary movements by people (e.g., walking).



### Waiting

Wasted time waiting for the next step in a process.



### Transportation

Unnecessary movements of products & materials.



### Defects

Efforts caused by rework, scrap, and incorrect information.



### Overproduction

Production that is more than needed or before it is needed.



### Overprocessing

More work or higher quality than is required by the customer.

**go** LEANSIXSIGMA

<http://GoLeanSixSigma.com>

# STEP FOUR

Get Rid of Waste...

...including Waste Creating People



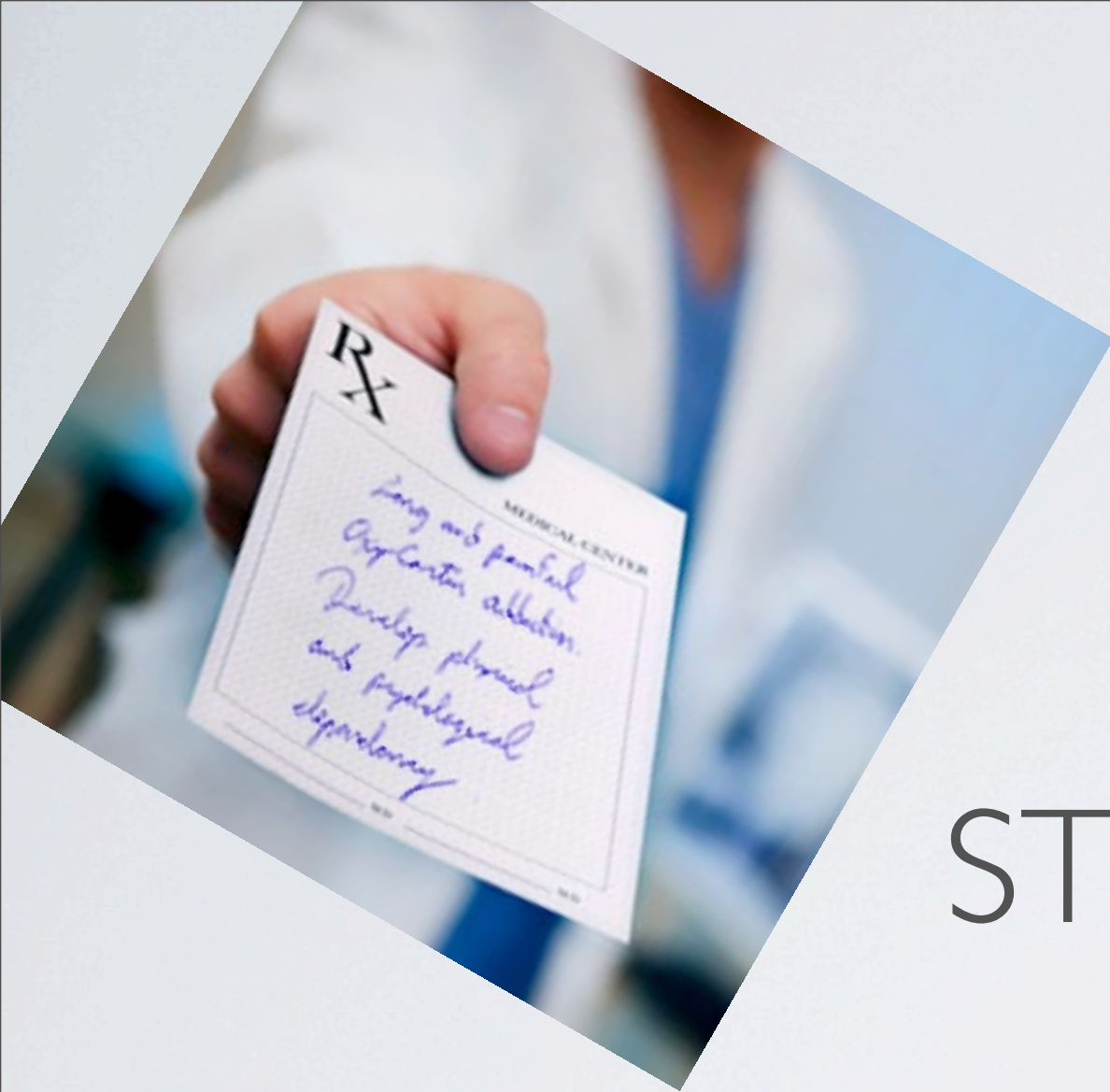


## STEP FIVE

Become Post-Heroic, and  
Help Others Do The Same







# STEP SIX (BONUS)

Don't Be Prescriptive



# CHANGE IS HARD

Be Disciplined



# CREDITS FOR “DID YOU KNOW? SHIFT HAPPENS”

From: Did you know: Shift Happens (2006)  
developed by Karl Fisch ([thefischbowl.blogspot.com](http://thefischbowl.blogspot.com))  
with assistance from Scott McLeod ([dangerouslyirrelevant.org](http://dangerouslyirrelevant.org))  
Designed by XPLANE ([xplane.com](http://xplane.com))  
Updated and revised February 3, 2013 by [blognology.com](http://blognology.com)



THANK YOU!

# **Lessons Learned From Five Years of Agile Implementation Failures**

or... What NOT to Do When Becoming Agile

by Devin B. Hedge / @agiledevin