



Agile DevOps Roadmap

Agile DevOps Strategy

When the world changes around you and when it changes against you — what used to be a tail wind is now a head wind — you have to lean into that and figure out what to do because complaining isn't a strategy.

- Jeff Bezos



Joe Butson

- Worked in Agile DevOps for 20 years.
- Served at Fortune 100 companies around the globe.
- Committed to helping people adopt an agile mindset, become more productive and collaborative, and deliver value to customers.
- Servant leader to product managers, software engineers, business leaders and executives in a variety of business categories.
- Deep knowledge and respect for DevOps, Scrum, Kanban, XP, Scaled Agile Framework, Disciplined Agile and lean management techniques.



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Agile DevOps Webinar Series So Far

1. Create an Agile DevOps Culture

2. Agile DevOps Strategies

3. Value Stream Management

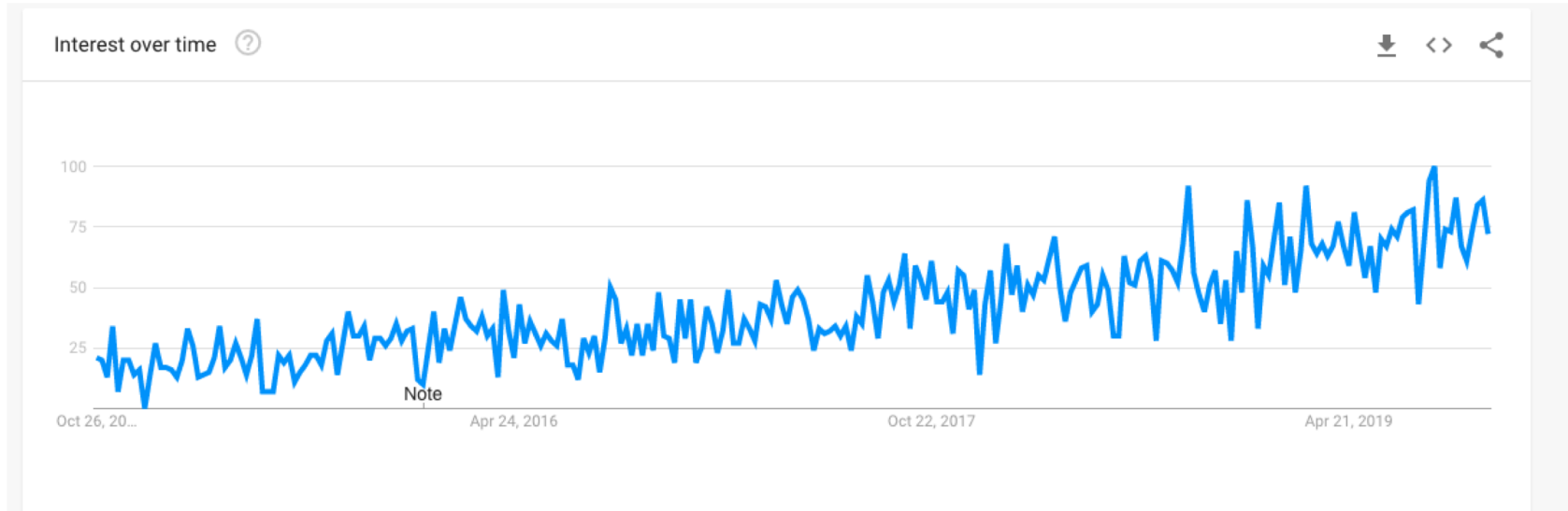


Agile DevOps + Value Stream Management

What we'll cover today:

- Preparing your team(s): systems thinking
- Objectives and Key Results
- Scaling Agile DevOps
- How to use your Value Stream Map
- What not to do: Agile DevOps anti-patterns
- How high-performing teams succeed

Google Trend: Cloud Native



<https://trends.google.com/trends/explore?date=today%205-y&geo=US&q=Cloud%20Native>

Preparing the Team

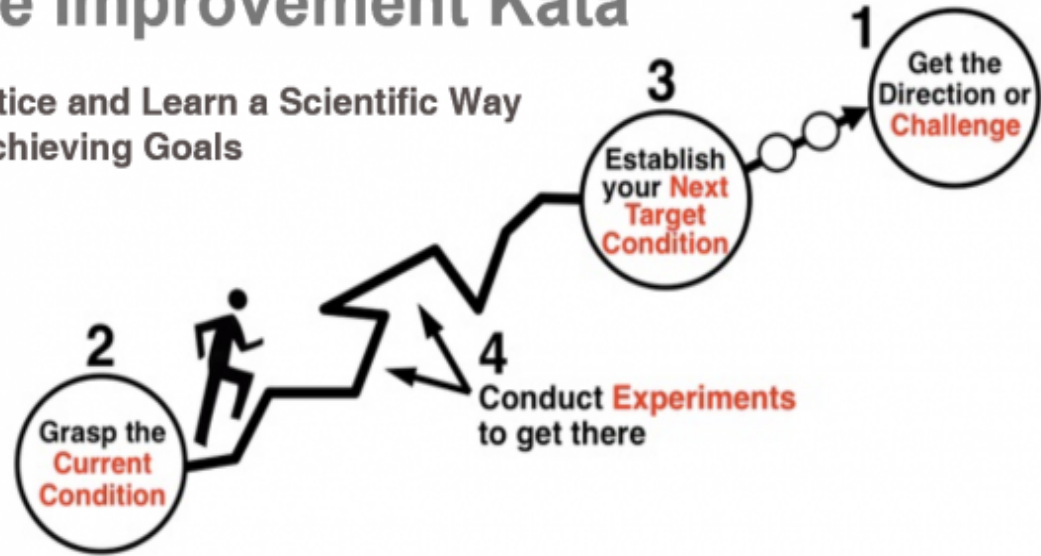
Kata: a way to keep two things in sync or harmony with one another.

Easy to understand.

Difficult to practice!

The Improvement Kata

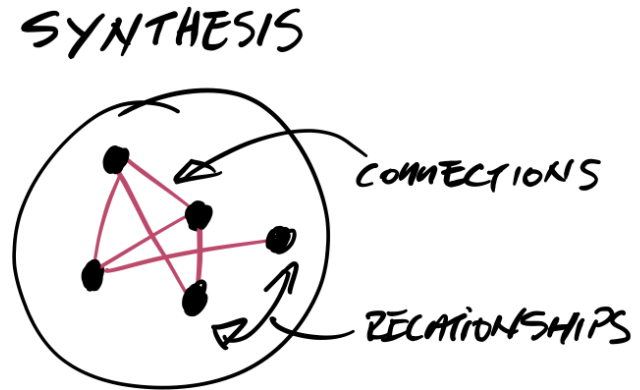
Practice and Learn a Scientific Way of Achieving Goals



Preparing your team

Systems Thinking

- Extremely effective for solving difficult problems.
- Instead of isolating the problem into smaller parts, aim to gain a broader perspective.
- This creates a better understanding for long-term solutions.





Systems Thinking

“Systems thinking is a discipline...for seeing wholes rather than parts, for seeing patterns rather than snapshots and for understanding subtle connectedness.”

- Peter Senge, The Fifth Discipline

Not Using Systems Thinking: Example

- You know you need to automate extensively.
- Your Kaizen workshop isolates opportunities for automation.
- Sprints are planned.
- You focus on first-class tools and team trains on the tools.
- Directionally, you are heading the right way, but...



Not Using Systems Thinking: Anti-Pattern

- Committee or architects picked the tools, but won't actually be using them.
- No buy-in from the team, product management or sponsors.
- Lesson: optimizing on tools creates a sub-optimal outcome or a new problem to solve.





Poll Questions

Self-Organizing for Success

- Transition team charter includes letting the team self-organize.
- Start with the big picture: cloud, hybrid (cloud + on premises).
- Review the entire value stream analysis: prioritize the opportunities.
- Take each opportunity and understand their economics.
- Share the prioritized list with the whole organization.





Objectives and Key Results

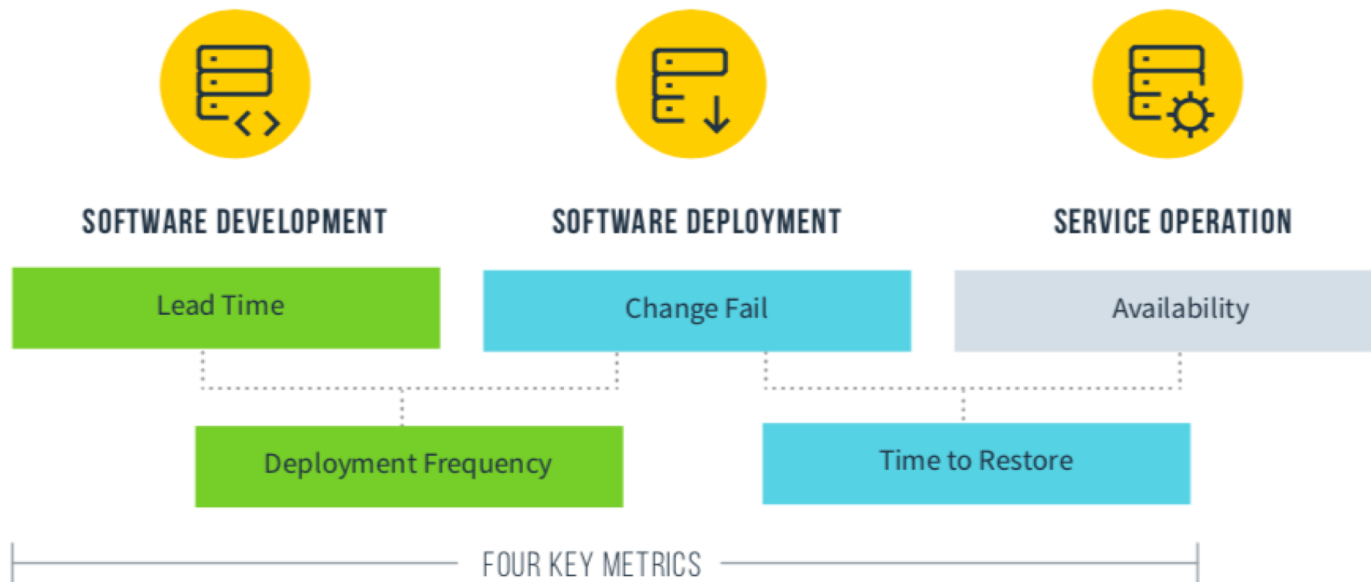
- Objectives and Key Results (OKR) is a goal-setting methodology driven by ***outcomes***.
- Rather than metrics/outputs, we set our goals and focus on realizing them.



Objectives Should...

- Be easy to understand so that they can be implemented properly.
- Reflect targets that you want to accomplish in a specific time period.
- Be aspirational.
- Need to be flexible so you can adjust as needed.

DevOps Outcomes/Metrics: Throughput & Stability





High-Performing DevOps Teams

- Research consistently shows that speed and stability are outcomes that enable each other.
- Highest performers do significantly better on all 4 measures:
 1. Frequent deployments
 2. Lead time for changes
 3. Time to restore
 4. Change failure rate
- Low performers do *significantly worse* in all areas.

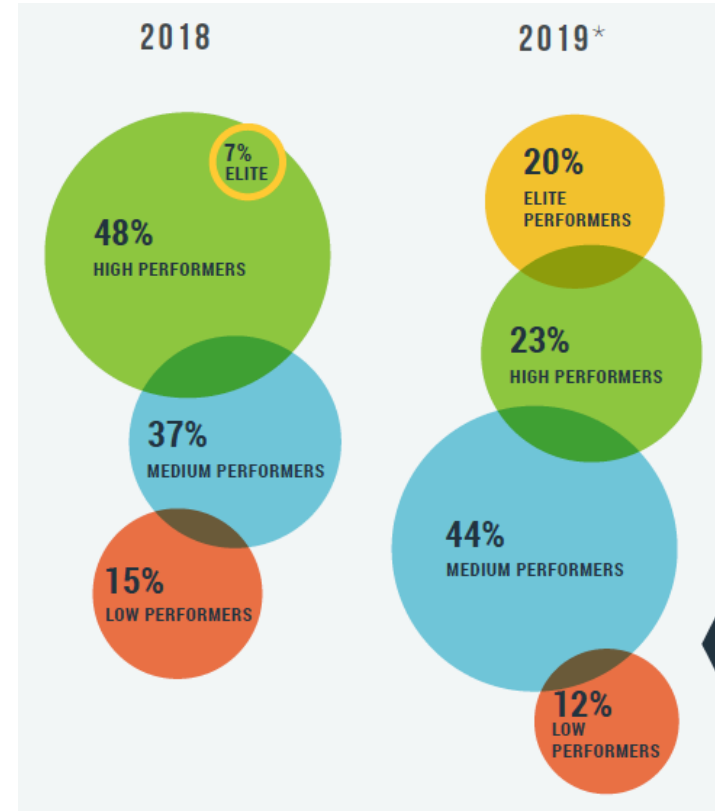


Poll Questions

Agile DevOps Scaling Strategies (State of DevOps Report 2019)

Four models and strategies used by elite/high performers:

1. Community Builders
2. University
3. Emergent
4. Experimenter





Agile DevOps Scaling Strategies (State of DevOps Report 2019)

1. Community Builders:

- 44% fall into this category.
- Focused on communities of practice, grassroots, and proofs-of-concept.

2. University:

- Only 9% fall into this category.
- Focused on education and training, with the majority of efforts going into centers of excellence, communities of practice, and training centers.
- Requires significant investment and planning to ensure that learnings are scaled throughout the organization.



Agile DevOps Scaling Strategies (State of DevOps Report 2019)

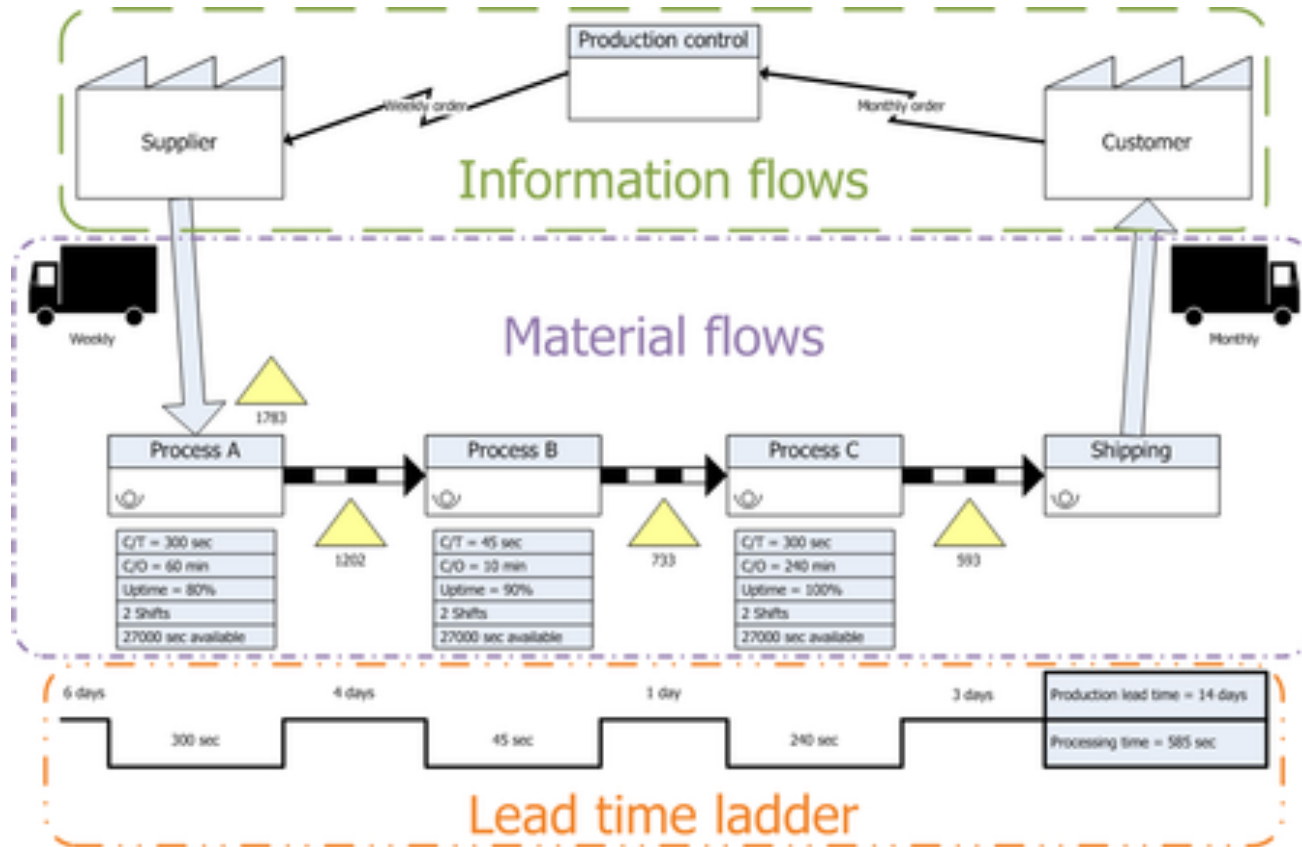
3. Emergent:

- 23% in this category
- This is the most hands-off group
- Focused on grassroots efforts and communities of practice

4. Experimenters:

- 22% in this category.
- This group has high levels of activity in all strategies except big bang and DOJOs (training venters).
- Focus is on community and creation.
- High engagement around proofs-of-concept that stall out, suggesting they use this strategy to experiment and test ideas quickly.

Remember this?



Maybe it looks like this?





Value Stream Analysis: What It Will Tell You

- Shows end-to-end process flow.
- Indicates where your queues are and where waste resides.
- Reveals inappropriate processing.
- Reveals overproduction and bloated features.



Value Stream Analysis: What It Won't Tell You

- Where to start.
- What is the highest value target.
- How to achieve FLOW.
- Who should be engaged.
- Where to automate or how to automate.



Group Problem Solving: *The Fifth Discipline*

- Today's problems come from yesterday's "solutions."
- The harder you push, the harder the system pushes back.
- Behavior gets better before it grows worse.
- The easy way out usually leads back in.
- The cure can be worse than the disease.

The Fifth Discipline: The Art and Practice of the Learning Organization (Pete Senge 1990)



Group Problem Solving: *The Fifth Discipline*

- Faster is slower.
- Cause and effect are not closely related in time and space.
- Small changes can produce big results, but the areas of highest leverage are often the least obvious.
- You can **have your cake and eat it too** — but not all at once.
- Dividing an elephant in half does not produce two small elephants.
- There is no blame.

The Fifth Discipline: The Art and Practice of the Learning Organization (Peter Senge)



Value Stream Analysis: How to Prioritize

Remember **Kata**: the foundational continuous improvement philosophy and culture exemplified by Toyota.

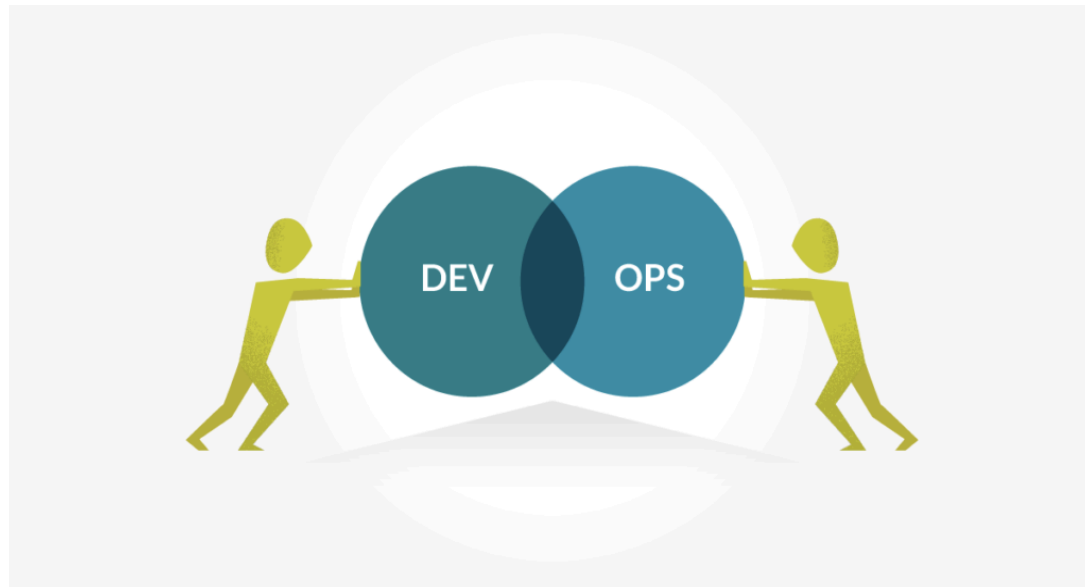
By implementing Kata, your organization can develop the habits and skills to shift individual mindsets and the corporate culture toward truly continuous improvement that keeps processes efficient, customers happy, and companies profitable.

Prioritize opportunities using:

- Business value
- Trim criticality
- Risk
- Effort

Agile DevOps Anti-Patterns: What Not To Do

- Agile DevOps is a process.
- DevOps is a silver bullet.
- We can't do DevOps, we're unique!
- Start a DevOps group.



Case Study: Retail Industry Competition Leads to High Performance

- Retailers may be at the forefront of this shift toward a competitive advantage, but we other industries (such as financial services) are quickly following.
- Competition forced retailers to figure out how to operate in a regulated environment (GDPR), quickly and securely.



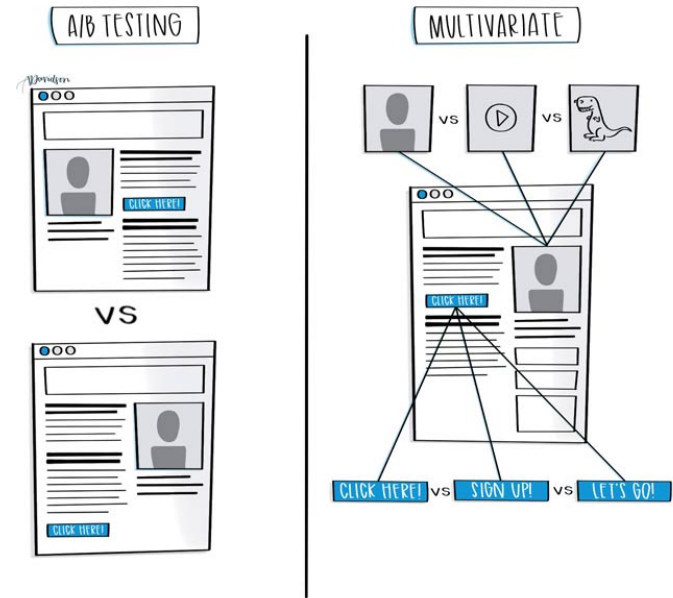
Ana Cabrita

Fintechs and major tech corporations have started rolling out new financial services that have the potential to severely disrupt the financial sector. [BBVA Research](#) has just published "[Digital Transformation and Competition in the Financial Sector](#)," a

Case Study: Retail Industry Competition Leads to High Performance

- Retailers were among the first to embrace A/B testing to understand customer buying habits, preferences and interactions on websites and apps to maximize revenue.
- Multivariate testing as a technical capability requires more robust solutions and provides a powerful feedback loop to product development and marketing.

WHAT IS A/B & MULTIVARIATE TESTING?



Case Study: Retail Industry Competition leads to High Performance

- Retailers must cope with huge swings in demand or risk going out of business. Black Friday can make or break a retailer's entire year.
- By leveraging the cloud, retailers can burst capacity easily. They aren't stuck in discussions about *if* or *when* they should use the cloud. They're already there.

J.Crew's website is crashing as customers try to shop Black Friday deals, and experts say it could have cost the company over \$700,000 in sales

Mary Hanbury Nov 23, 2018, 1:35 PM



Retailer Case Study: Cloud Native

“Cloud-native CI products with exceptional build speed, on-demand scale and secure configurations will lead the market and enable customers to accelerate delivery speed and lower management costs, all while meeting corporate compliance needs.”

- The Forrester Wave™ on Cloud-Native Continuous Integration Tools, Q3 2019



Q&A

