DevOps: An Effective Mindset Not Just Automation of Tooling and Practices
LEARNING OBJECTIVES & KEY TAKEAWAYS:

1. DevOps is a Capability that all delivery teams need, the journey is about how effective and efficient are we

2. DevOps is a Mindset applying the 3 ways per Gene Kim and not just a set of tools and practices

3. CALMR: SAFe DevOps practices & behavior
Figure 1: Disruptive innovation can hurt if you are not the one doing the disruption. (Source: Gartner.com)
DISRUPTION IS EVERYWHERE

This year represents the slowest rate of technological and societal change you are likely to experience in the rest of your life!

---message from keynote presenter Jonathan MacDonald
At 2015 Vision Critical Summit that

Jettisoned from the S&P 500

Kodak
Dell
Sprint

New S&P 500 companies

PayPal
Under Armour
Seagate
SHARE 3 EXAMPLES FROM 3 INDUSTRIES

A) Iteration
B) Innovation
C) Disruption
CONTINUOUS DELIVERY

Dream | Discover | Design | Develop | Deliver | Deploy | Delight

Continuous Delivery Pipeline

Agile Release Train

Continuous Exploration
Continuous Integration
Continuous Deployment
Release on Demand

Business Process

ah ha! ka ching!

Biz
Dev
Ops

Agile Development fixes this
DevOps fixes this

IMO, DevOps courtesy Damon Edwards
DevOps Timeline

- **2007**: Patrick Debois starts assessing IT Value Chain.
- **2008**: Agile2008 Conference.
- **2009**: Agile System Administrators Group is launched on Google.
- **2010**: Inaugural “DevOps Days” are held in Ghent, Belgium.
- **2011**: Industry leading software vendors increase market presence with “Enterprise” class DevOps tools.
- **2012**: Open Source toolsets rip up the legacy playbook.
- **2013**: Gene Kim releases “The Phoenix Project”.
- **2014**: DevOps begins to provide positive impact to “Enterprise” IT.
- **2015**: devX is born and xceed launches the “12 days of DevOps”.

**So much in so Little Time (8 years)**
WHAT DO YOU THINK?

IS THIS TIMELINE REPRESENTING:

A) Iteration
B) Innovation
C) Disruption
DO WE EXIST?
YES WE EXIST!

HOW EFFICIENT ARE WE?

HOW EFFECTIVE ARE WE?
WHAT IS DEVOPS?

An agile approach to **bridge the gap** between development and operations to deliver value **faster and more reliably**.

**Development:**
- Create change
- Add or modify Features

**Operations:**
- Create stability
- Create or enhance services

*DevOps is a capability of every Organization*
IT DEPENDS ON HOW WE EXIST WHERE WE EXIST …
WHAT DO YOU THINK?

DO THE TEAMING TOPOLOGY REPRESENT:

A) Iteration
B) Innovation
C) Disruption
### WHAT'S EFFECTIVE?

<table>
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<tr>
<th>Failures due to inconsistent dev and production environments</th>
<th>Bottlenecks trying to deliver more frequent releases to meet market demands</th>
<th>Complex, manual, processes for release lack repeatability and speed</th>
<th>Poor visibility into dependencies across releases, resources, and teams</th>
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A DevOps transformation requires you to map your bottlenecks.

https://www.youtube.com/watch?v=U99t6eK000I
WHAT’S THE TAKEAWAY?

LEARNING OBJECTIVE #1

DevOps is a Capability that all delivery teams need & have

The journey is about how effective and efficient we get
The 3 Ways: The principles underpinning DevOps

Blog by Gene Kim

The 1st Way: Systems Thinking

- I can see (perceive) it...
  - Silo vs. System concept

The 2nd Way: Amplify Feedback Loops

- I see ways for you to do better via feedback & data
  - System improvements via visibility, feedback and data-driven decisions

The 3rd Way: Culture Of Continual Experimentation And Learning

- With a common vision, everyone can see and is empowered to adapt!
  - Mastery and adaptability
  - Continuous exploring, risk/learning tolerance...
Applying The 3 Ways

Source: Value Stream Mapping, Karen Martin and Mike Osterling
APPLYING BEHAVIOR CHANGES ONLY

Value stream map example
WHAT DO YOU THINK?

Does the “3 WAYS” application represent
A) Iteration
B) Innovation
C) Disruption
DevOps as a Mindset applying the 3 ways per Gene Kim can be INNOVATIVE!

3 principles of DevOps line up with SAFe Lean-Agile Principles #2, #5 & #6

DevOps as a Mindset applying the 3 ways per Gene Kim can be INNOVATIVE!
DevOps is an essential core element of SAFe.
DEVOPS IS THROUGHOUT THE VALUE STREAM

Value is delivered only when the end users have consumed the Solution.

DevOps isn’t optional. The only question is how efficient it is.
A **CALMR** APPROACH TO DEVOPS

- **Culture** Establish a culture of shared responsibility for development, deployment and operations.

- **Automation** Automate the continuous delivery pipeline.

- **Lean flow** Keep batch sizes small, limit WIP and provide extreme visibility.

- **Measurement** Measure the flow through the pipeline. Implement application telemetry.

CALMR ALLOWS US TO,

ITERATE?

INNOVATE?

DISRUPT?
CALMR ALLOWS US TO

ITERATE W/ AUTOMATE & MEASURE

INNOVATE W/ A M W/ LEAN FLOW & CULTURE

DISRUPT W/ C A L M & RECOVER & RELEASE-ABILITY
CALMR as a Mindset can be DISRUPTIVE!

CALMR: SAFe DevOps practices & behavior to scale DevOps in Enterprise

WHAT’S THE KEY TAKEAWAY?

LEARNING OBJECTIVE #3
SO, WHAT IS DEVOPS?

DevOps is an effective mindset that enables value delivery to be faster, routinely and reliably in **iterative**, **innovative** or **disruptive way**.

It nurtures a culture, applying a set of principles and technical practices, enabling collaboration and close cooperation among all the *people* needed to **Dream | Discover | Design | Develop | Deliver | Deploy | Delight**
WHAT DO YOU THINK?

WHAT IS DEVOPS?

An agile approach to **bridge the gap** between development and operations to deliver value **faster and more reliably**.

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DEVOPS IS AN EFFECTIVE MINDSET?

DevOps is an effective mindset that enables value delivery to be faster, routinely and reliably in **iterative, innovative or disruptive way**.

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it's Q&A TIME!
Vikas is a transformation practitioner with a passion for aligning to Lean-Agile values and principles applying behaviors and practices to enable delivery of highest business value with built-in quality at the earliest in a predictably and sustainable cycle. He excels at quickly delivering business value, simplifying the seemingly complex, and delighting customers. He is able to achieve these results by consistently building radically prolific, high performing teams by believing to look listen & learn before initiating collaboration, coaching, training and facilitation. Trusted partner, synergist and change catalyst with consultative communication style, qualified to unify stakeholders and inspire cross-functional teams to deliver that propel business forward & accelerate business strategies.

Experience - 19+ Years Solutions Delivery, Consulting, and Coaching | 15 years Service Delivery | Being Agile 15+ years | Training Agile 8 years | Devops | System Team | Portfolio | Product Owner | Scrum Master | UI - UX Coach

Companies Coached | Trained: 724 Solutions, Acision, AIG, Andanza Technologies, Bank Of America, Cisco Systems, Capital One, Ericsson, Fannie Mae, Gaurdian Life, iDirect, John Hancock, Mastercard, Mobixell, National Geographic Society, Nestle Purina, Nike, Peer1 Hosting, Scottrade, Tennessee Valley Authority, Unisys, UST Global


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