

# DevOps Foundation®



DevOps  
Institute

PeopleCert

# Tell Us a Little About Yourself

Please let us know who you are:

- Name, organization and role
- DevOps/Agile/Lean/ITSM experience
- Why you are attending this course
- What you expect to learn



What is your definition or perception of DevOps?

# DevOps Foundation Course Goals

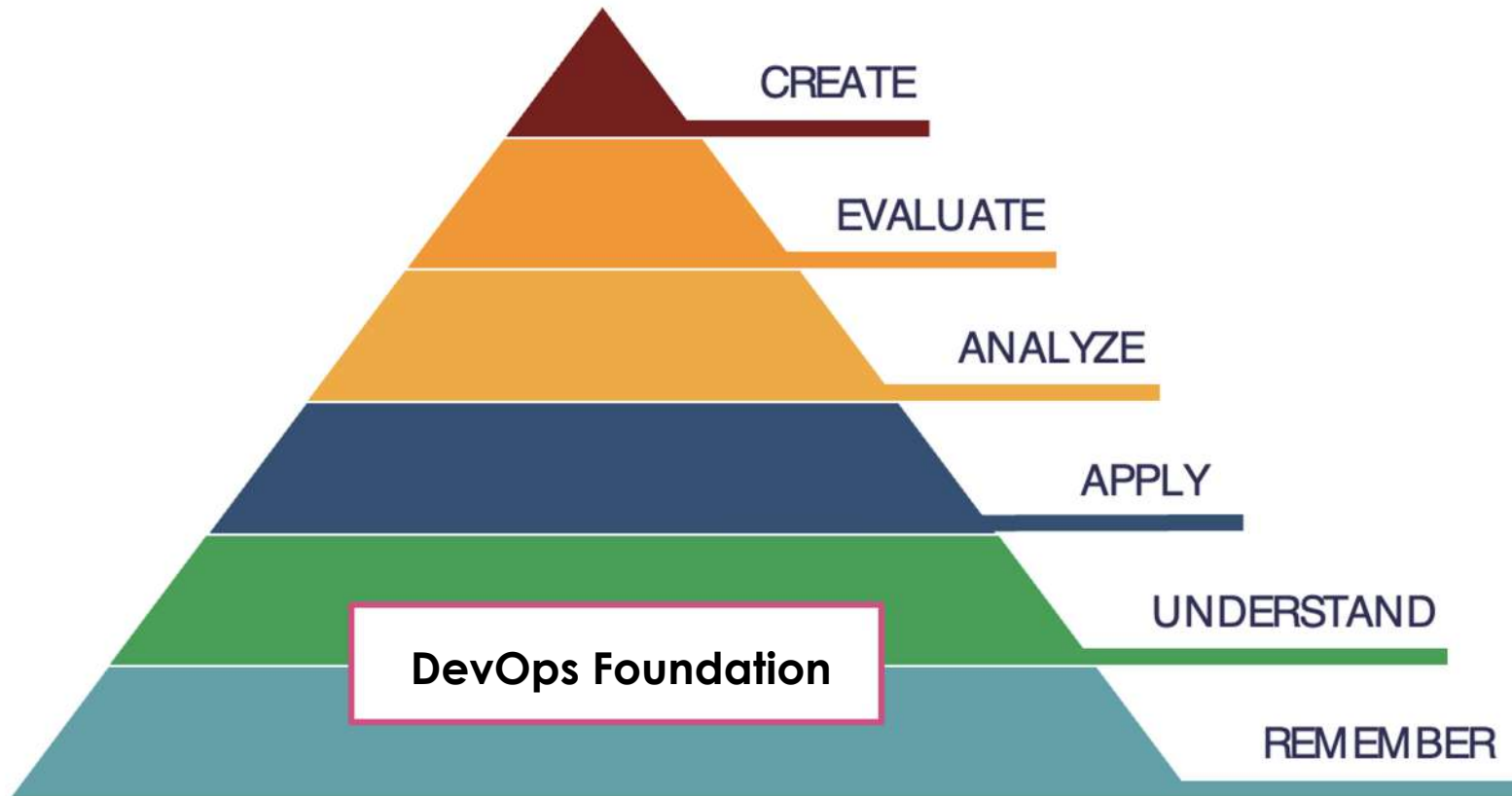
- Learn about DevOps
- Understand its core vocabulary, principles, practices and automation
- Hear and share real life scenarios
- Have fun!



## Pass the DevOps Foundation Exam

- 40 multiple choice questions
- 60 minutes
- 65% is passing
- Accredited by DevOps Institute
- Get your digital badge

# Course Methodology & Bloom's Taxonomy



DevOps Institute utilizes Bloom's Taxonomy to create rigorous courses and exams with clearly defined objectives and learning outcomes.



This framework is important to the learning experience. It ensures that both the instructors and participants understand the course goals, have a clear rubric for how knowledge will be assessed, and that the goals and assessments are aligned with the defined objectives.



# DevOps Foundation

## Course Content Schedule



DAY 1		DAY 2	
<b>Module 1</b>	Exploring DevOps	<b>Module 5</b>	<b>Cultures</b> , Behaviors, and Operating Models
<b>Module 2</b>	Core DevOps Principles	<b>Module 6</b>	<b>Automation</b> & Architecting DevOps Toolchains
<b>Module 3</b>	Key DevOps Practices	<b>Module 7</b>	<b>Measurement</b> , Metrics & Reporting
<b>Module 4</b>	Business and Technology Frameworks	<b>Module 8</b>	<b>Sharing</b> , Shadowing & Evolving







**DevOps  
Institute**

- Module 1
- Exploring DevOps



# Module 1: Exploring DevOps

- Defining DevOps
- Why Does DevOps Matter?
- The Business Perspective
- The IT Perspective

Component	Module 1 Content
Video	A Short History of DevOps with Damon Edwards
Case Story	ING Bank, Netherlands
Discussion	DevOps Myths versus Realities
Exercise	Your Organizational Why

# Defining DevOps





# The DevOps Collective Body of Knowledge

True to its core values, DevOps is emerging through a shared and collective body of knowledge (CBoK) including:



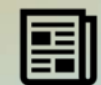
Publications



Videos and webinars



Conferences



Blogs and articles



MeetUp groups



Case studies



Slack channels



Awards



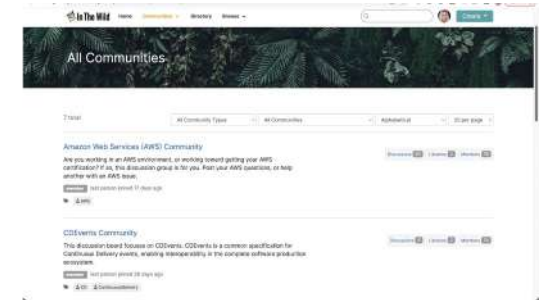
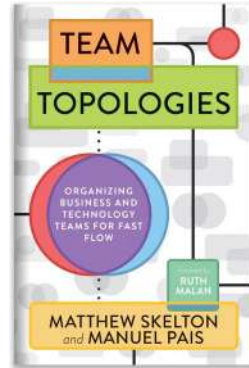
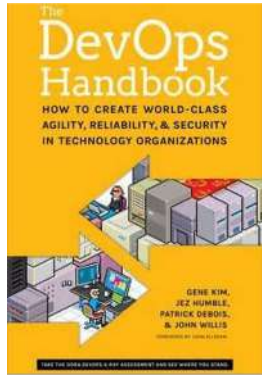
LinkedIn groups



Subject matter expertise

DevOps Institute actively researches and influences emerging DevOps practices in order to create meaningful training and certification.

# The DevOps Collective Body of Knowledge (2)



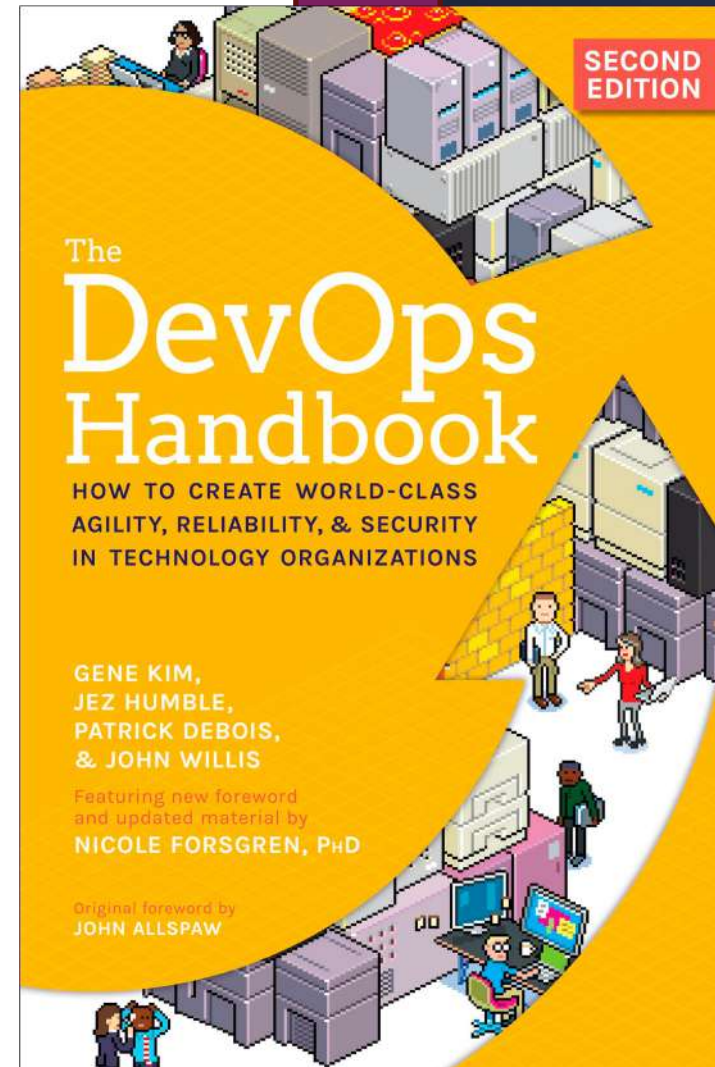


The Short History of DevOps  
with Damon Edwards (11:47)



# What is DevOps?

“Imagine a world where product owners, Development, QA, IT Operations and Infosec work together, not only to help each other, but also to ensure that the overall organization succeeds. By working towards a common goal, they enable the fast flow of planned work into production, while achieving world-class stability, reliability, availability and security.”





# What is DevOps? (2)

*It's taken me 10-plus years to come up with my own one-line definition of DevOps: **“DevOps is whatever you do to bridge friction created by silos, and all the rest is engineering.”** And so, if you're doing technology just for the technology and you're not trying to overcome some friction of the human kind of siloing or group siloing or information siloing or whatever, then **you're just doing the engineering part and you're not, in my opinion, doing the DevOps part.***

**Patrick Debois, Advisor, Snyk (Formerly DevOpsDays)**



Patrick Debois originally coined the word 'DevOps'



# What DevOps Is NOT

- A title
- A separate team
- A tool
- Only culture
- Only automation
- Anarchy
- A one size fits all strategy



DevOps is coming to life through emerging practices that are delivering real value in real organizations.

# Why DevOps Is Important Now

- Enterprises have young, nimble startup competitors
- Agile software development and cloud infrastructure is increasing
- IT can no longer operate in a silo culture
- More organizations are migrating to the cloud
- Consumers have “app” mentalities and expectations
- There is more data available to the business
- Time to value must accelerate

To meet these changing conditions, IT must adapt its culture, practices and automation to be more “continuous”.



# What Makes DevOps So Unique?

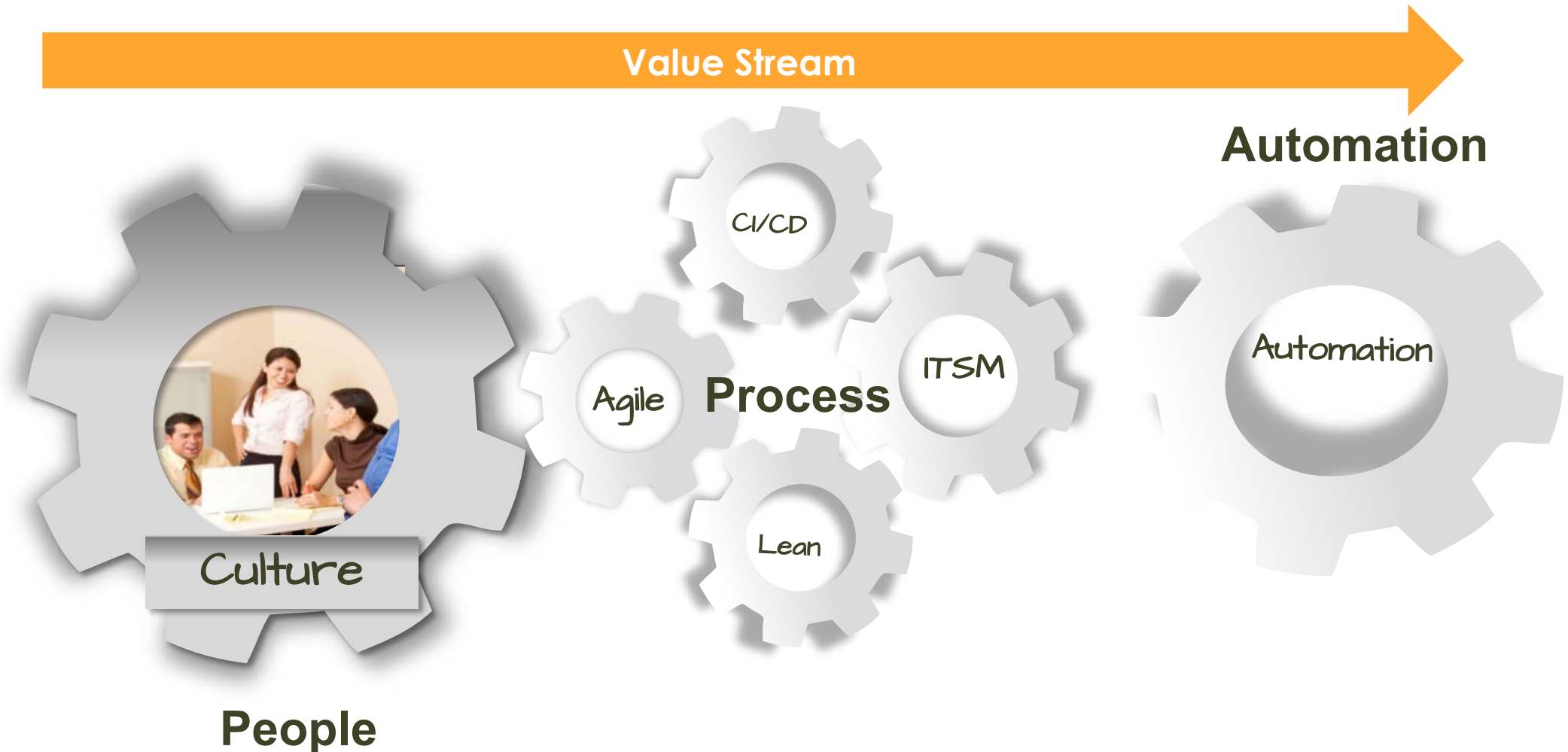


- Is it better than Scrum for improving the workflow of developers?
- Is it better than cybersecurity practices?
- Is it better than Lean in keeping IT more efficient?
- Is it better than ITIL® for service management?
- Is it better than Organizational Change Management for culture?
- Is it better than tools, technologies and automation?

Each of these frameworks and approaches have delivered some degree of benefit but none have delivered full end-to-end IT improvement.

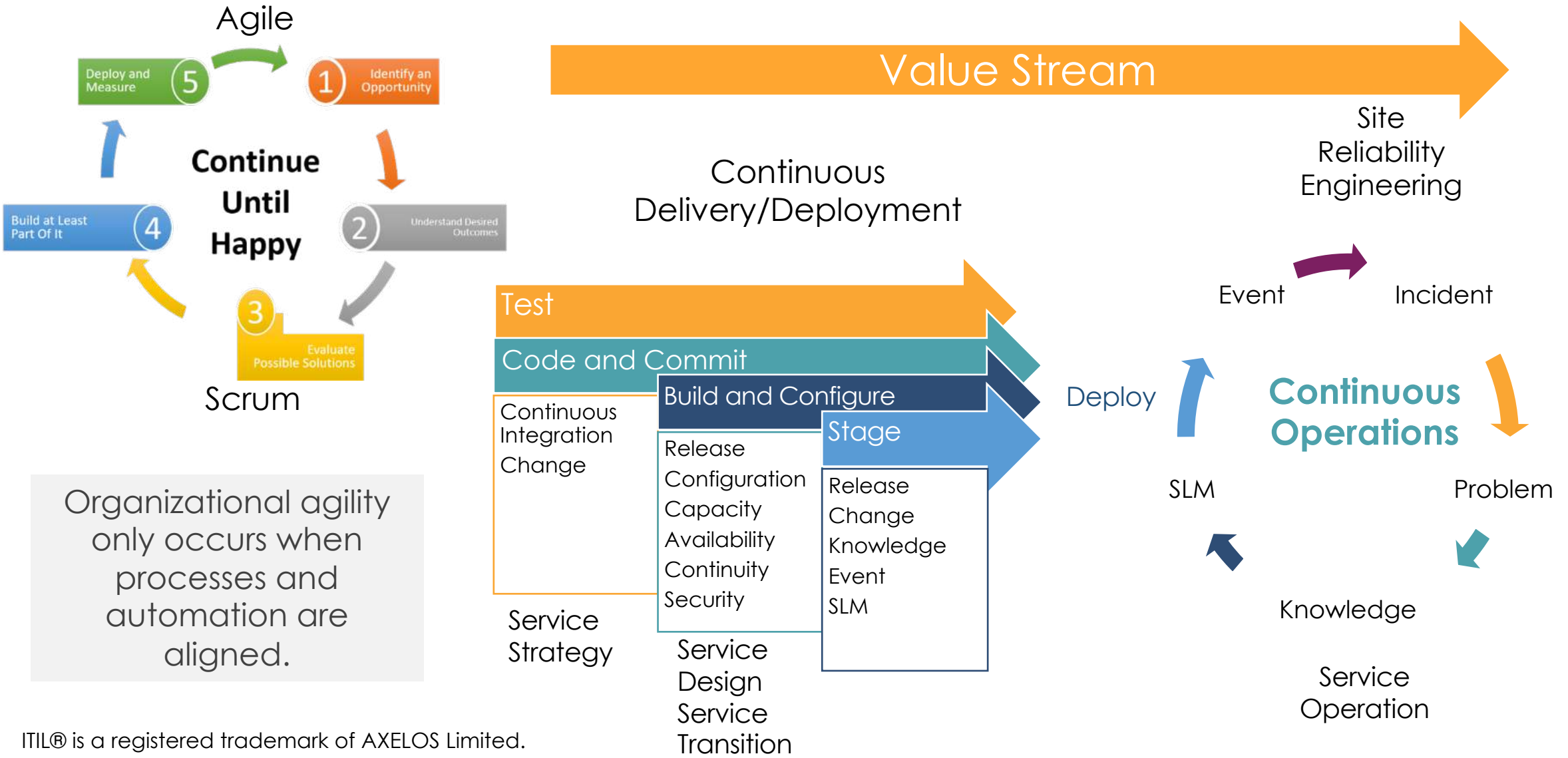


# DevOps Applies Systems Thinking Across the Entire IT Spectrum



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# IT is a System of Systems



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# DISCUSSION

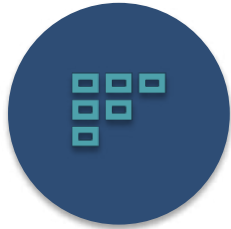
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## DevOps Myths versus Realities

# DevOps Goals



SMALLER, MORE  
FREQUENT RELEASES



REDUCED EFFORT  
AND RISKS



REDUCED COST OF  
PRODUCT  
ITERATIONS AND  
DELAYS



A CULTURE OF  
COMMUNICATION  
AND COLLABORATION



CONSISTENCY AND  
SPEED THROUGH  
AUTOMATION

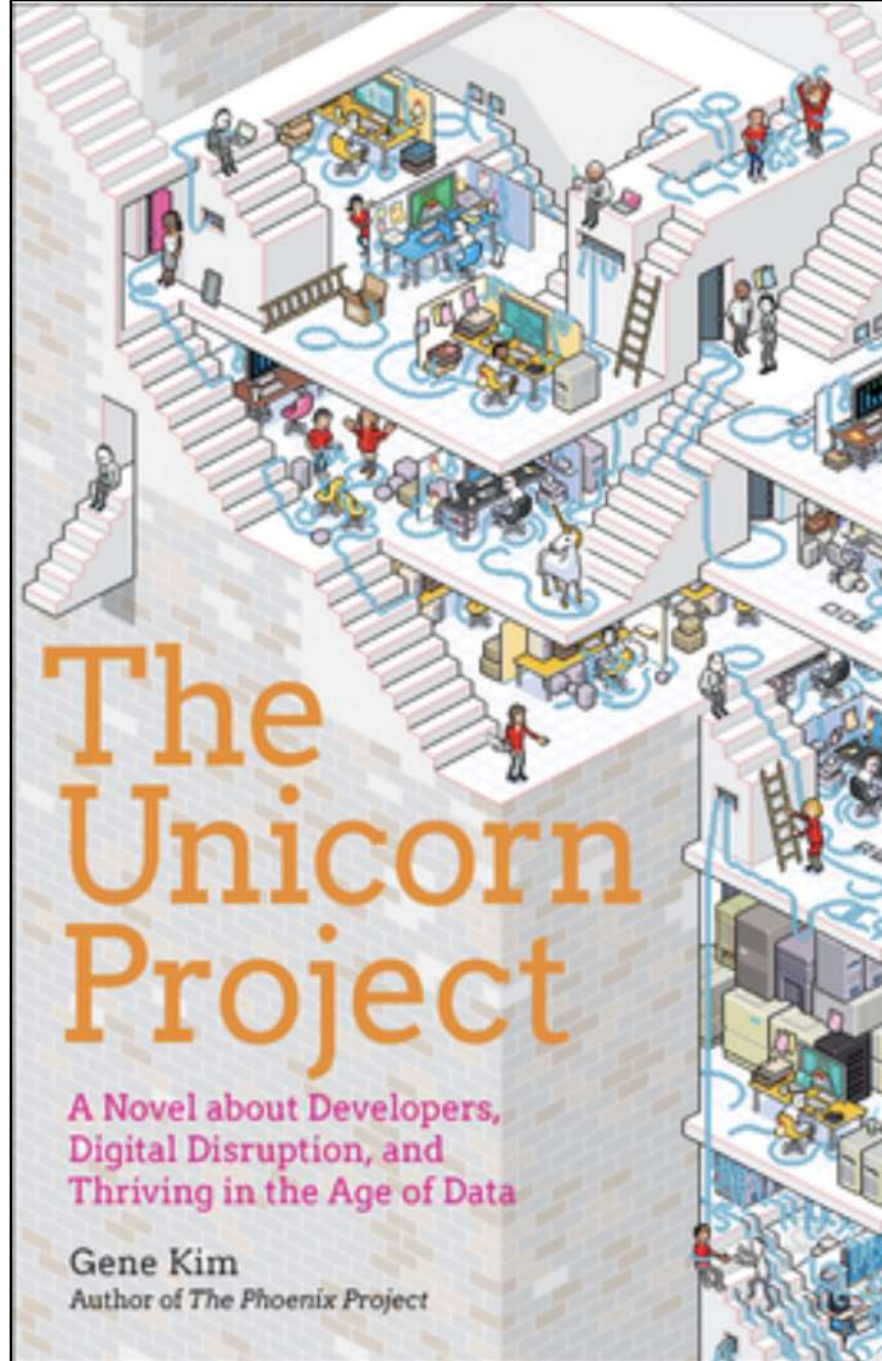
## Improvements in

- Time to market/value
- Integration with the business
- Responsiveness
- Code and deployment quality
- Productivity
- Visibility
- Agility



# DevOps Values

- **C**ulture
- **A**utomation
- **L**ean
- **M**easurement
- **S**haring



## The 5 Ideals

### The First Ideal:

Locality and Simplicity

### The Second Ideal:

Focus, Flow, and Joy

### The Third Ideal:

Improvement of Daily Work

### The Fourth Ideal:

Psychological Safety

### The Fifth Ideal:

Customer Focus

# Automation Is an Essential Element

Automation enables agility, consistency, speed and reliability.



Shared decision-making, access to and an understanding of toolchains and other automation streamlines software delivery and prepares Ops for the long run.



# DevOps Stakeholders

**Dev** includes all the people involved in developing software products and services including:

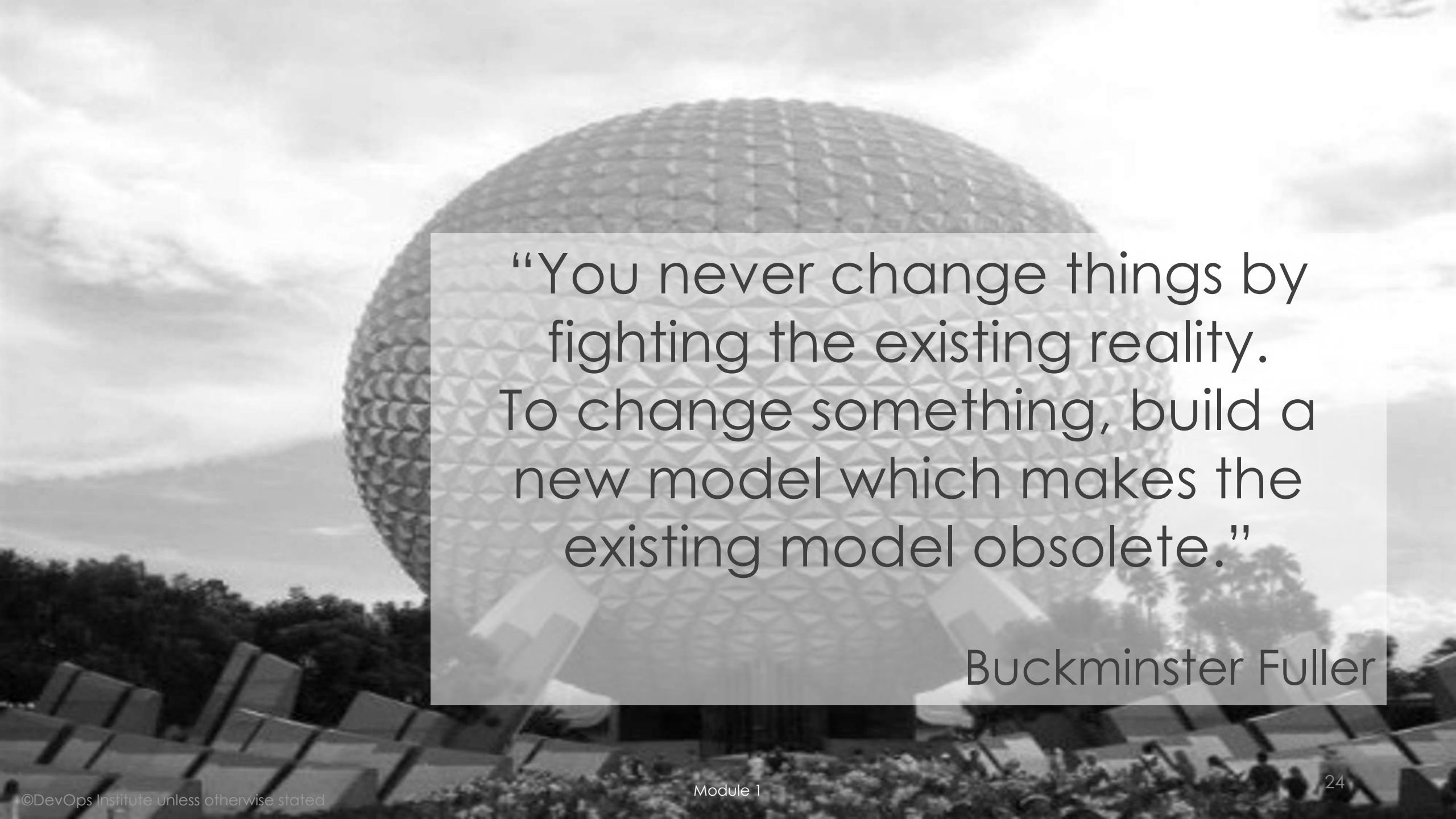
- architects
- business representatives'
- customers
- product managers
- project managers
- quality assurance (QA) testers and analysts
- suppliers



**Ops** includes all the people involved in delivering and managing software products and services including:

- information security professionals
- systems engineers
- system administrators
- IT operations engineers
- release engineers
- database administrators (DBAs)
- network engineers
- support professionals' suppliers

**DevOps extends beyond software developers and IT operations**



“You never change things by fighting the existing reality. To change something, build a new model which makes the existing model obsolete.”

Buckminster Fuller



# Why Does DevOps Matter?

