#DOH19

MODINE'S JOURNEY TOWARDS A DEVOPS CULTURE

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What’s DevOps?

Who has DevOps culture?
Who is transitioning ?
Who lost hope?

What’s DevOps?

A set of practices intended to reduce the time between committing a change to a system and the change being placed into normal production, while ensuring high quality

(wikipedia.en)

DevOps Is…

DevOps and its resulting technical, architectural, and cultural practices represent a convergence of may philosophical and management movements

DevOps is the outcome of applying the most trusted principles from the domain of physical manufacturing and leadership to the IT value stream.

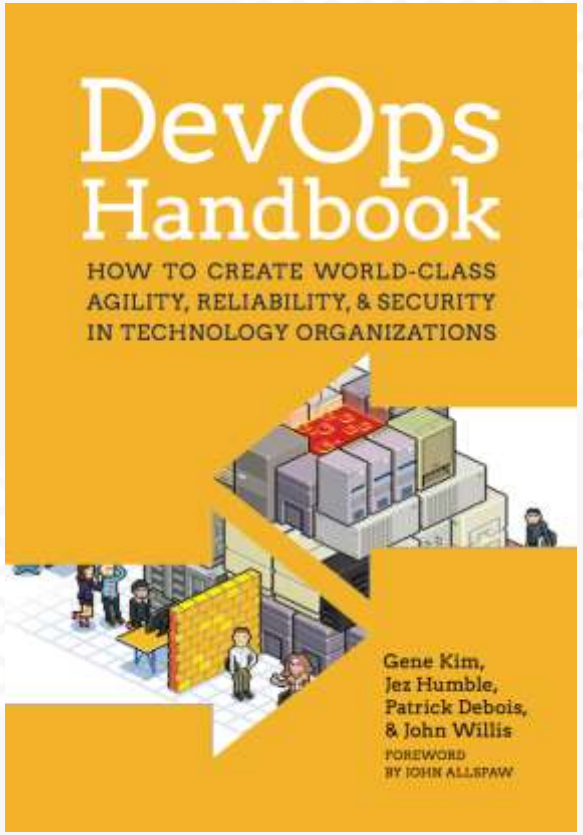
[….]many also view DevOps as the logical continuation of the Agile software journey that began in 2001

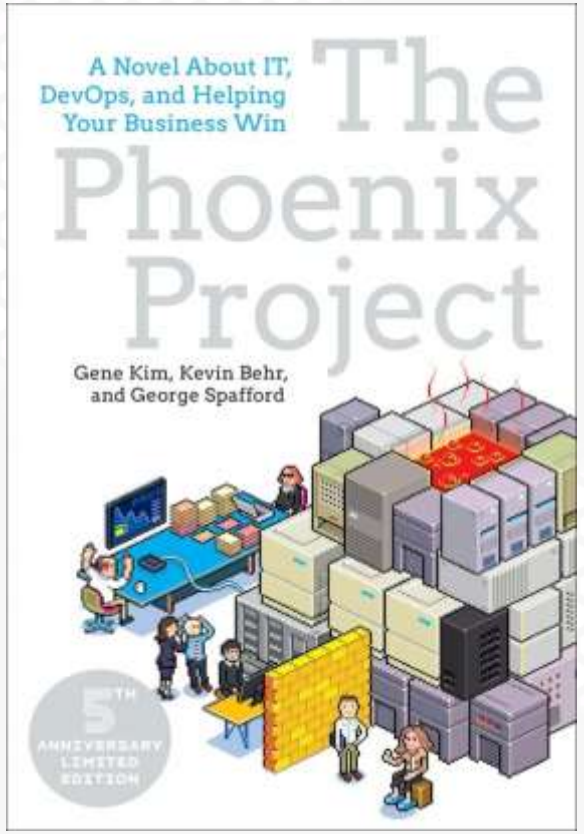
(The DevOps Handbook)

DevOps Is…

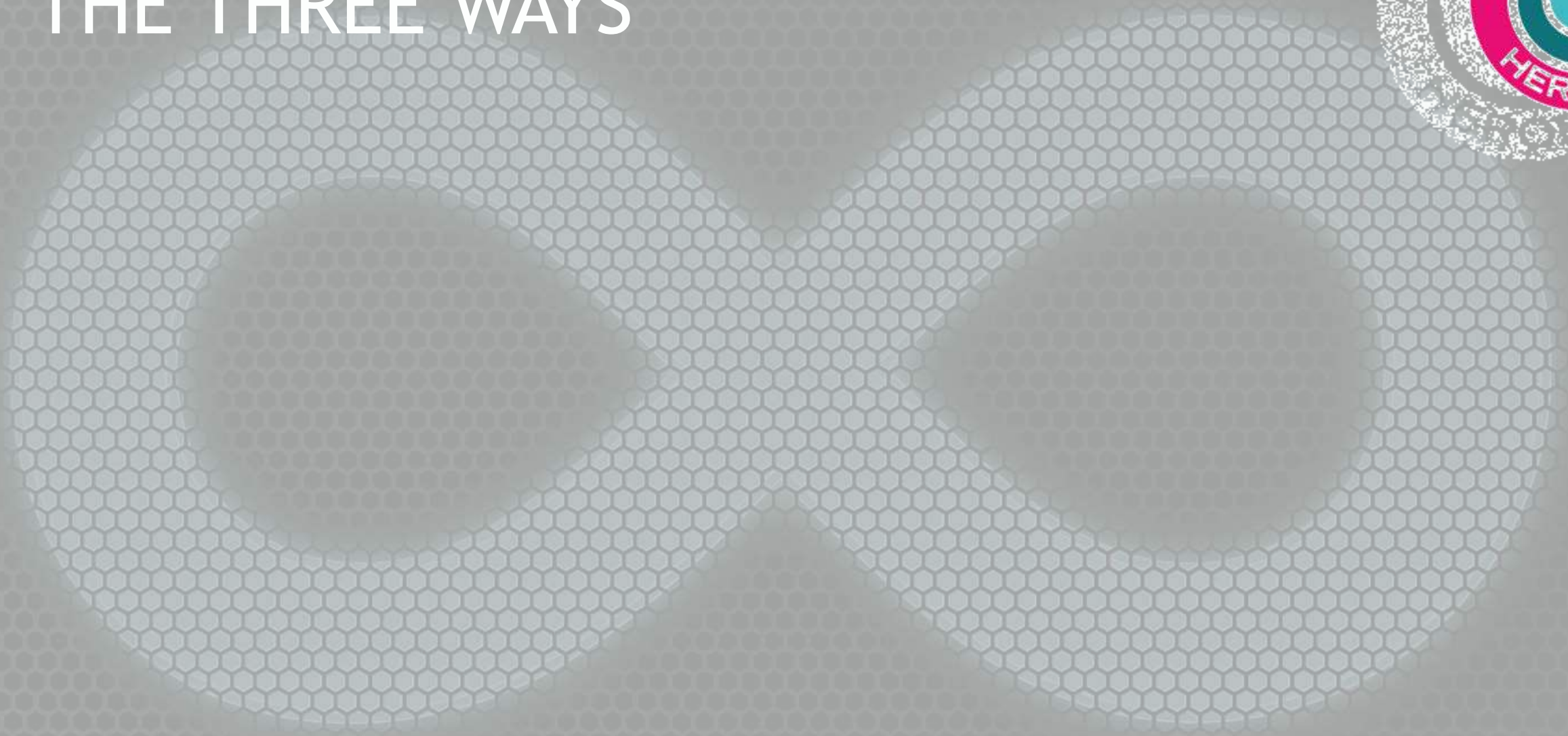
DevOps is the result of applying Lean principles to the technology value stream

(The DevOps Handbook)



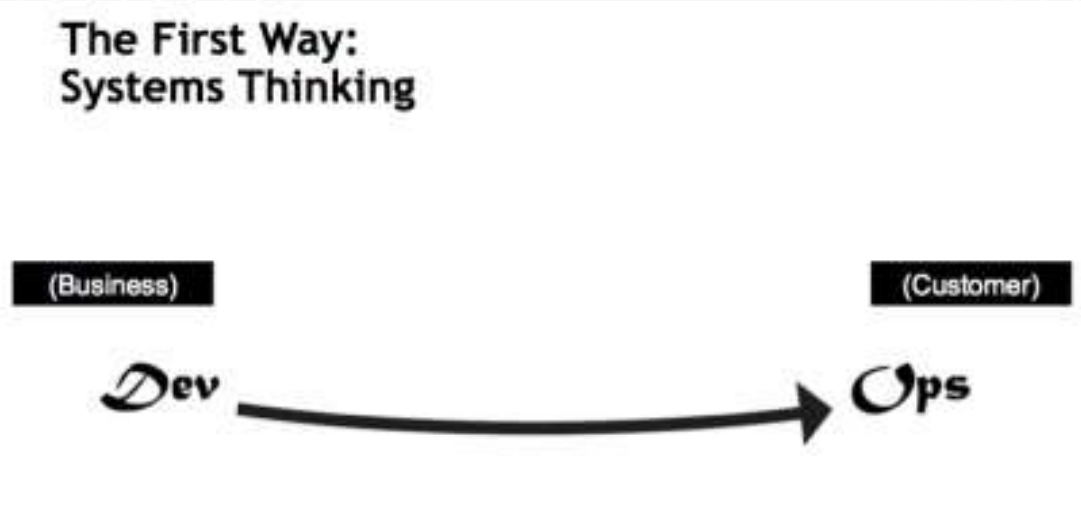


THE THREE WAYS



The First Way

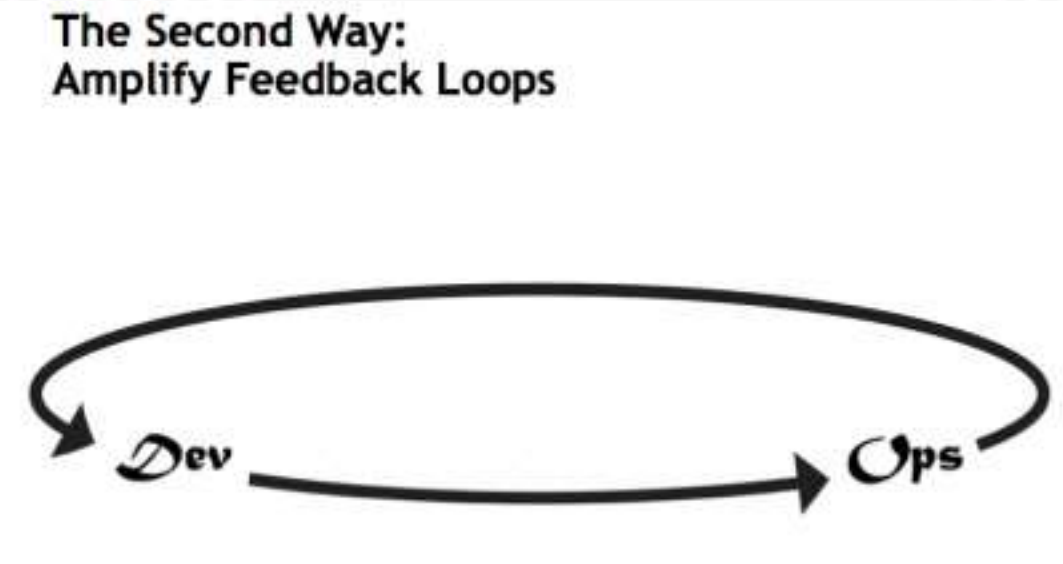
Delivering value to the customers at steady pace



- Make your work Visible
- Limit Work in progress
- Reduce batch sizes
- Reduce the number of handoffs
- Continually identify and elevate your constraints
- Eliminate hardships and waste in the value stream

The Second Way

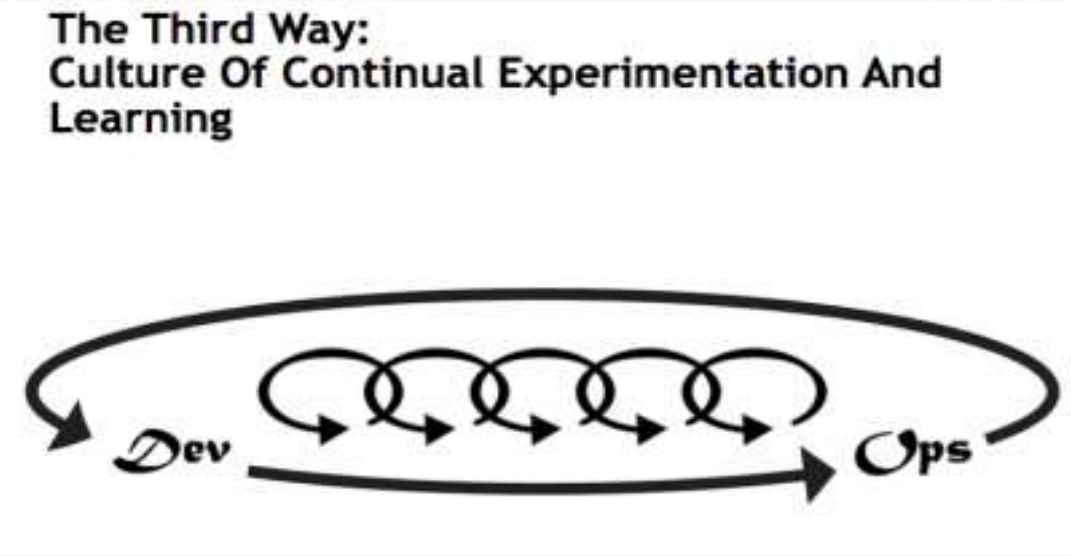
Course correction and learnings based on feedback



- Working safely within complex systems
- See problems as they occur
- Swarm and solve problems to build new knowledge
- Keep pushing quality closer to the source
- Enable optimizing for downstream work centers

The Third Way

Learn, Grow and Improve over time

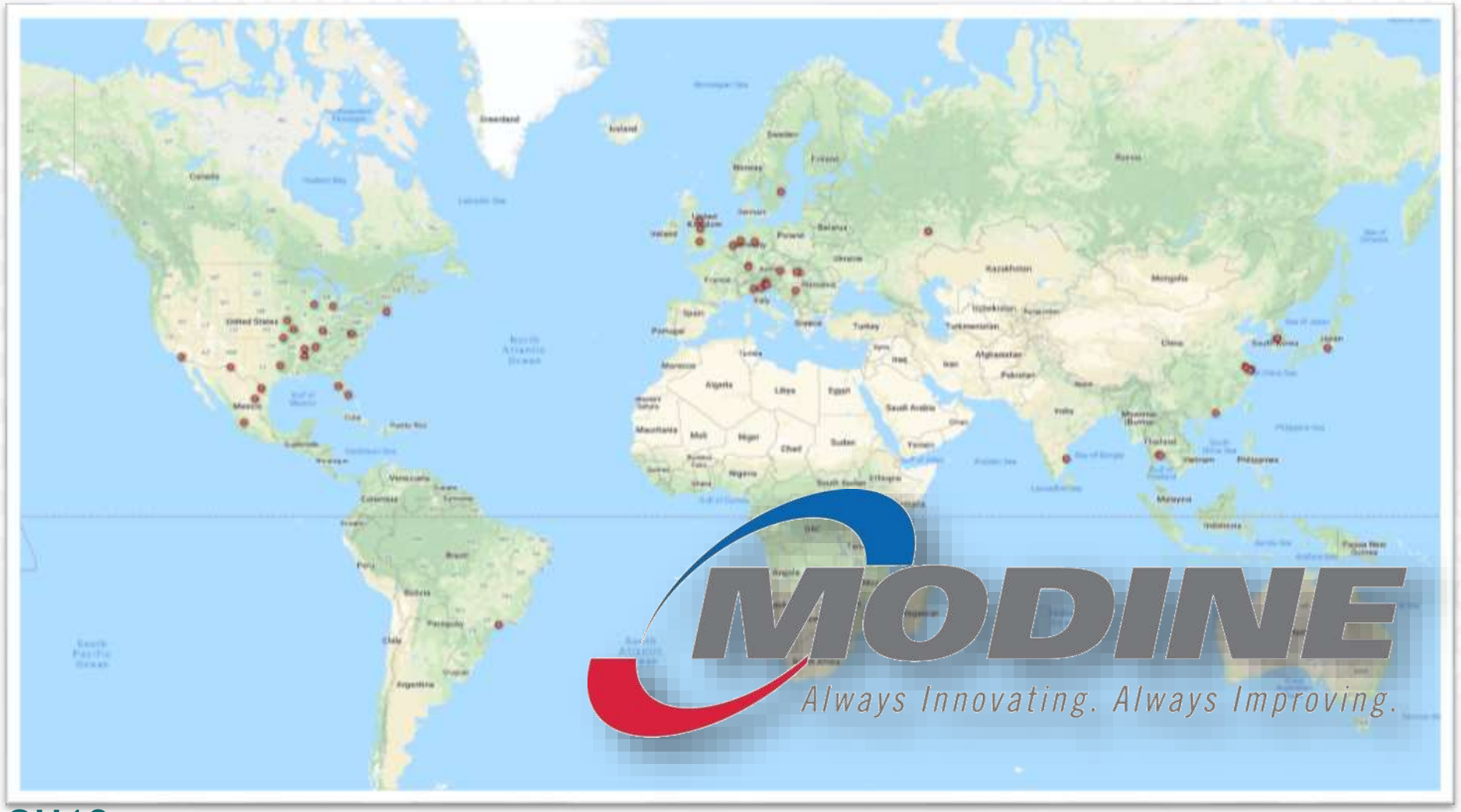


- Enabling organizational learning and a safety culture
- Institutionalize the improvement of daily work
- Transform local discoveries into global improvements
- Inject resilience patterns into our daily work
- Leaders reinforce a learning culture

The Three Ways – Skill Chart

WHO IS MODINE?

Modine is…



ONE AND A HALF YEARS AGO…

Version Control

Vault from Source Gear

Dated technology

Centralized

Difficult to integrate

Problems during normal operation

Requirements and Bugs Handling

From Trello to Jira

Recently migrated to Jira
Beginning to use Kanban
No use of Jira’s analytics
Start proper reporting

Release Management

Partial automation

Partly by hand

Part scripted

Risky and Slow

Code Status

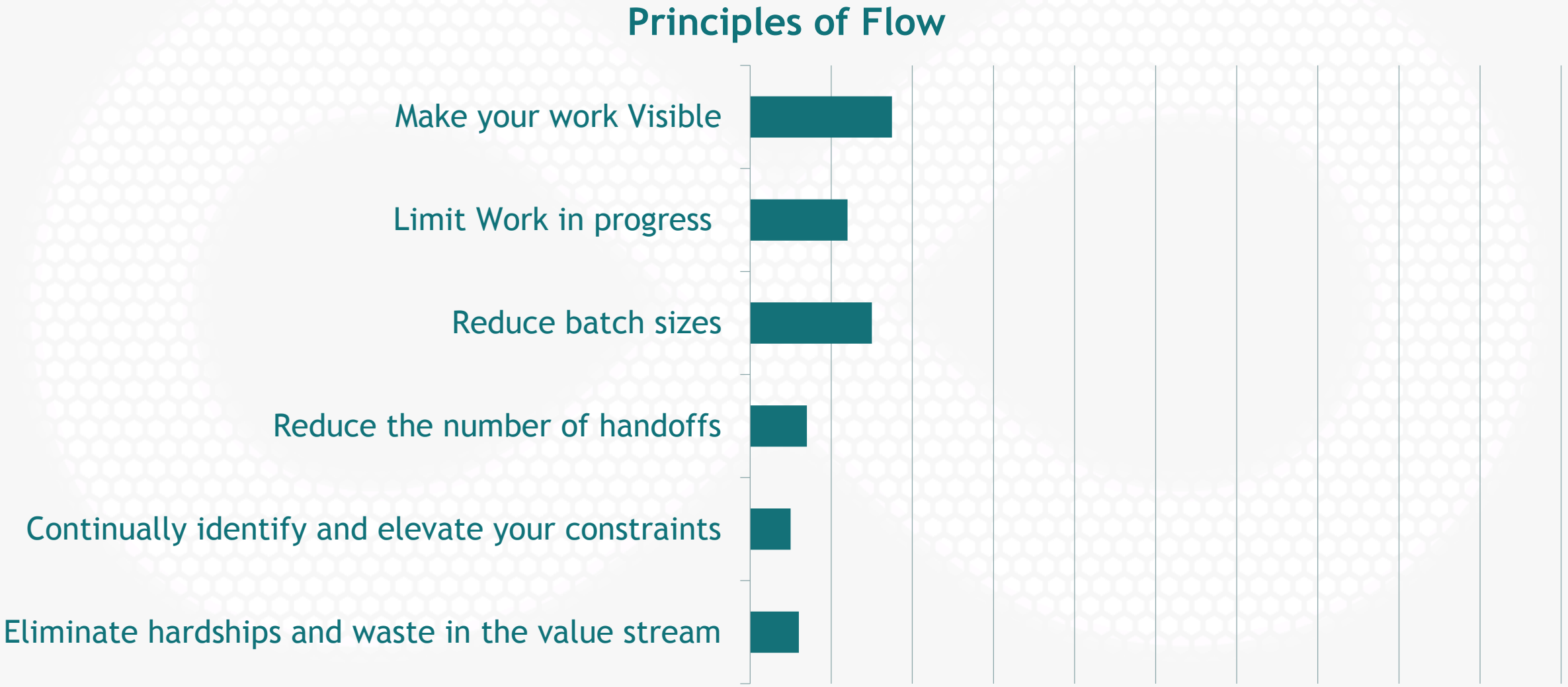
Old Code	Procedural Low Quality
New Code	Low Quality from Contractor Good Quality from Team
Tests	No Tests

Relationship with IT

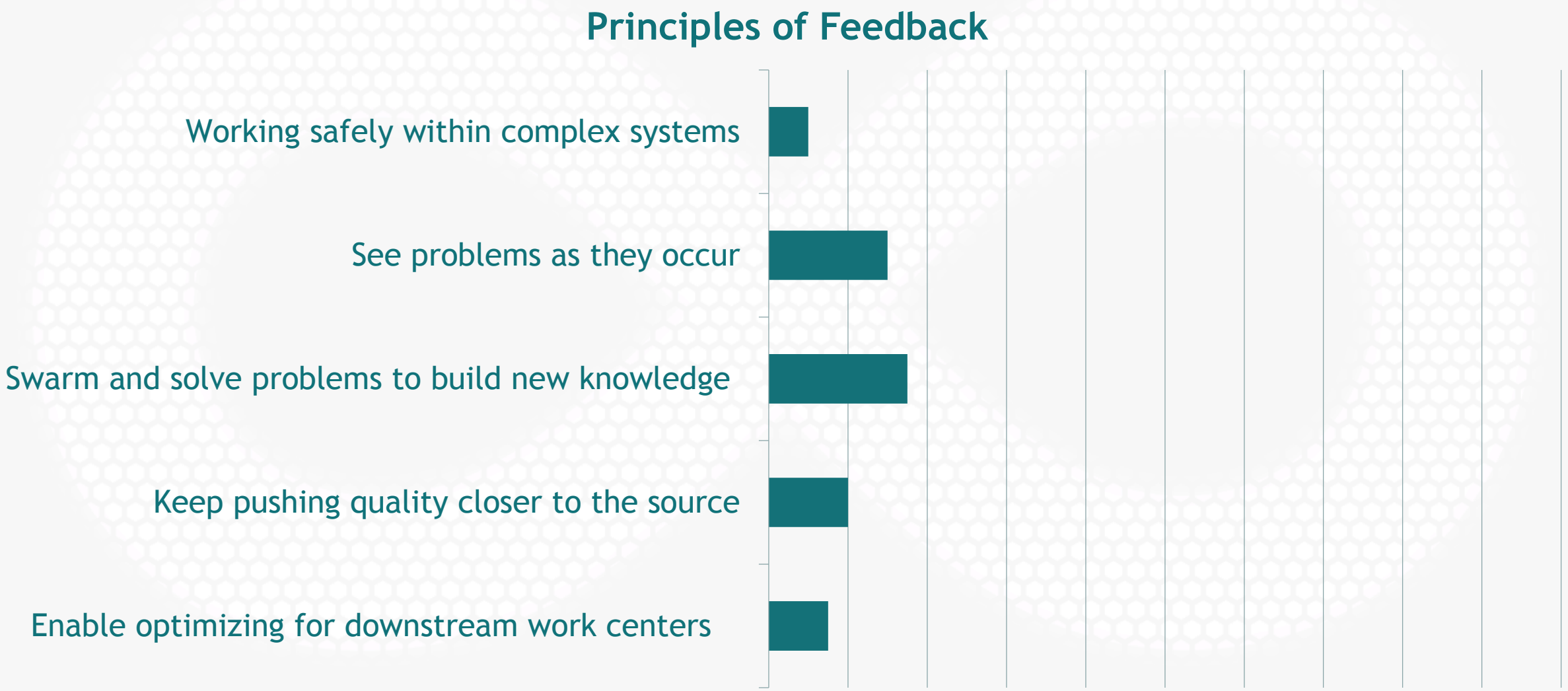
Complicated	
Plus side	Almost complete control over all flow Collaborative
Negative side	Bureaucratic Slow reaction to our requests

MODINE AND THE THREE WAYS BACK THEN

The First Way



The Second Way



The Third Way

Principles of Learning and Experimentation

IMPROVEMENT ACTIONS

Code Life Cycle

Source Control Management	One of the biggest roadblocks Modern technology Needed
Technologies analyzed	SVN Git
Decided for Git	Better integration More flexibility

Code Life Cycle

Migration strategy	Clean History Partial History All History
How to choose	https://bit.ly/32PqF89 Search XXX to Git

Code Life Cycle

Where to Host Code	Custom Central Repo BitBucket Azure DevOps Services
Selection criteria	Easy of use Integration with other Tools Future development

Deployment Automation

Azure DevOps Pipelines	Powerful Easy of use
Build pipeline	Hosted Quick
Release pipeline	On-premise Should be easy but…

Demo

Deployment Automation

Where to start?

https://bit.ly/2WfBeP0

https://dev.azure.com

Demo

Tests

The problem with Tests	Always left for later CI inefficient without tests
Pilot project	Unit Tests UI Tests
Adopting UI Tests across the board	More Visual Easier to “sell” Easier on brownfield

Tests

Where to start?

Start! Don’t Ask

Gherkin (Specflow, Cucumber)

Slowly Automate

Sell the concept with patience

Security

The problem with Tests	Always left for later Started collaborating with Sec Team
Dev team	Simple security checks with Static Code Analysis Dependency Vulnerability checks OWASP ZAP
Sec Team	More in depth pen test

Security

Where to start?

- OWASP Top Ten
- OWASP Developer Guide
- OWASP Zed Attack Proxy
- OWASP Wealth of Information and tools

- Dependecy Checker and RetireJS
- Static Code Analysis

Project Management

Support	Jira Better suited for handling support Improving reporting policy Improving Analytics
New Projects	Azure DevOps Boards Better suited for managing Agile projects

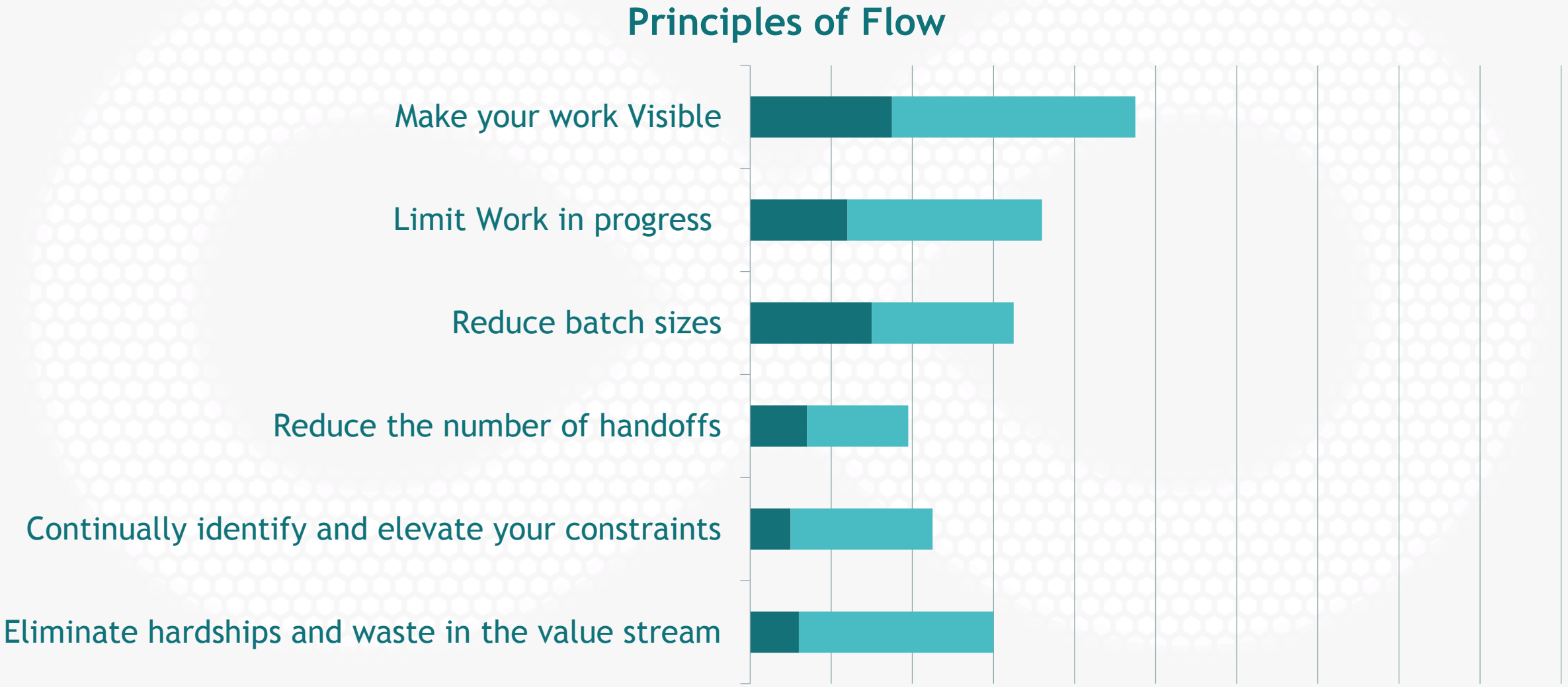
Other actions

Team sessions for improvement actions

Cloud development

MODINE AND THE THREE WAYS NOW

The First Way



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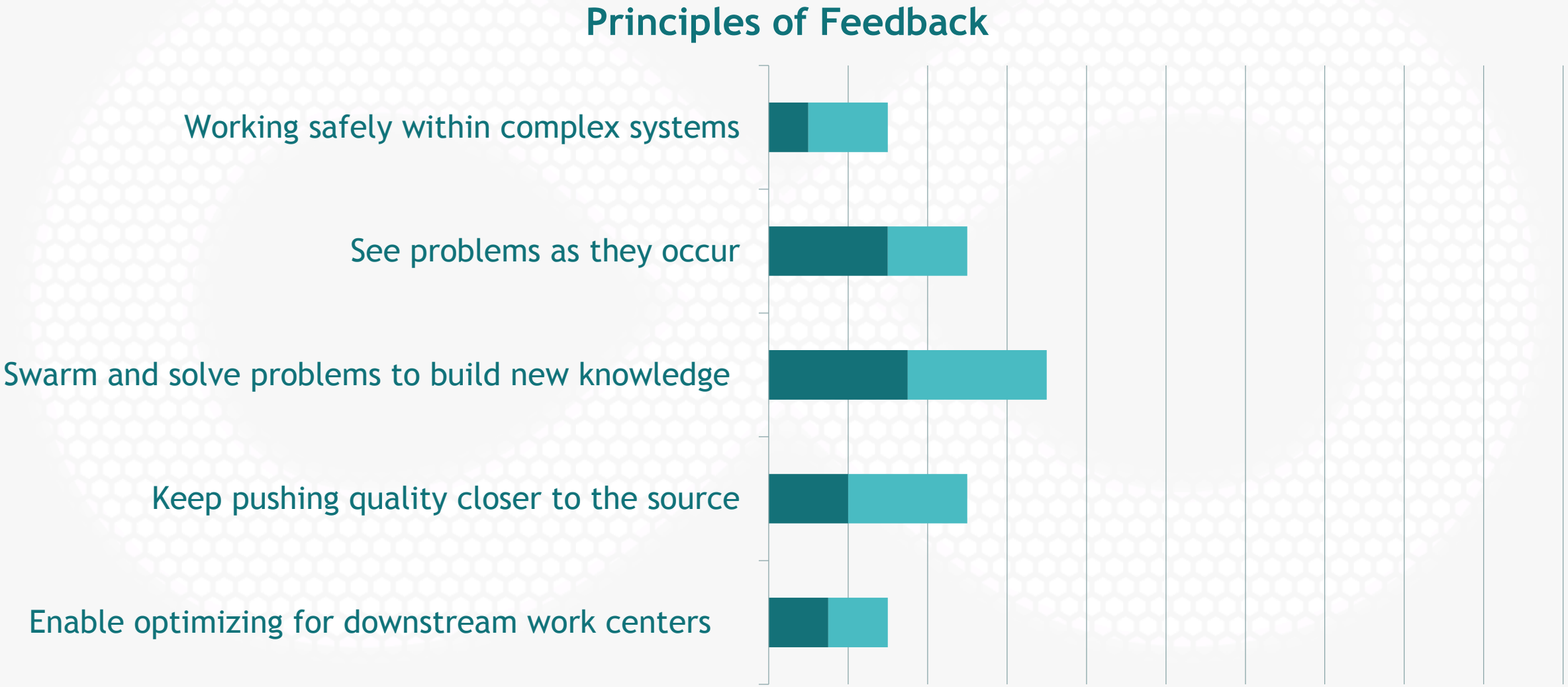

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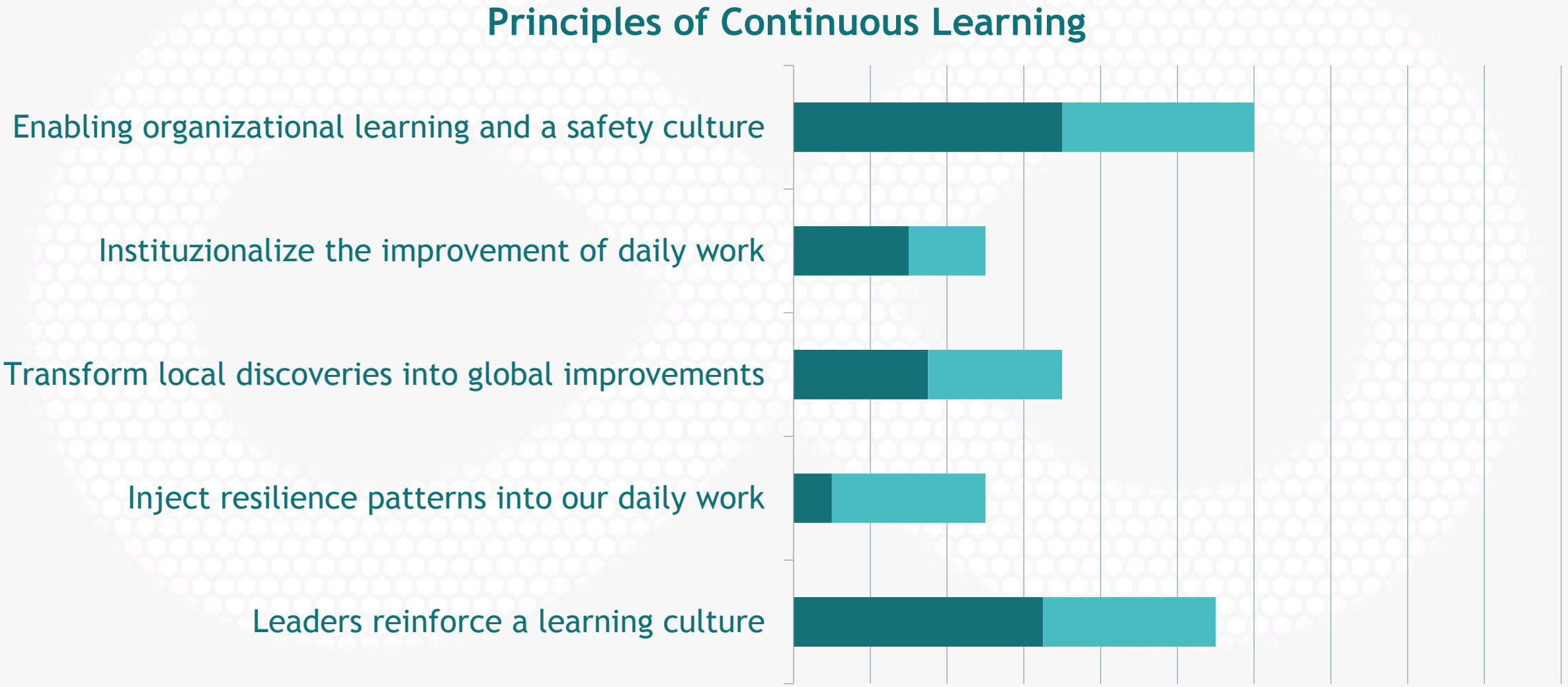

Wrapping up…

Clear improvement

Work on The Three Ways

Flow

Feedback

Learning

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THANK YOU!

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