

# Carnegie Mellon University

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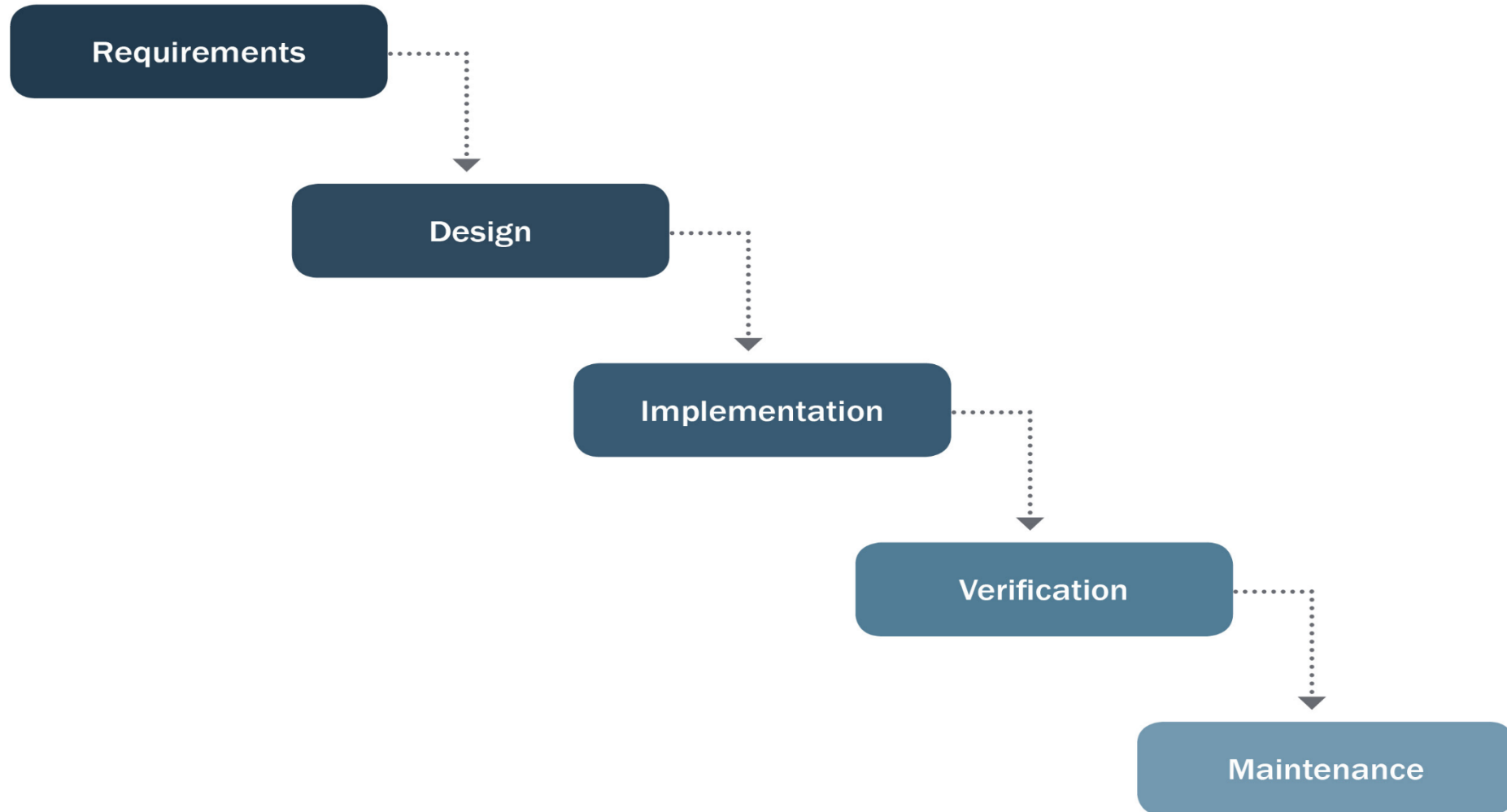
# Culture Shock: Unlocking DevOps Through Collaboration and Communication

Software Engineering Institute  
Carnegie Mellon University  
Pittsburgh, PA 15213

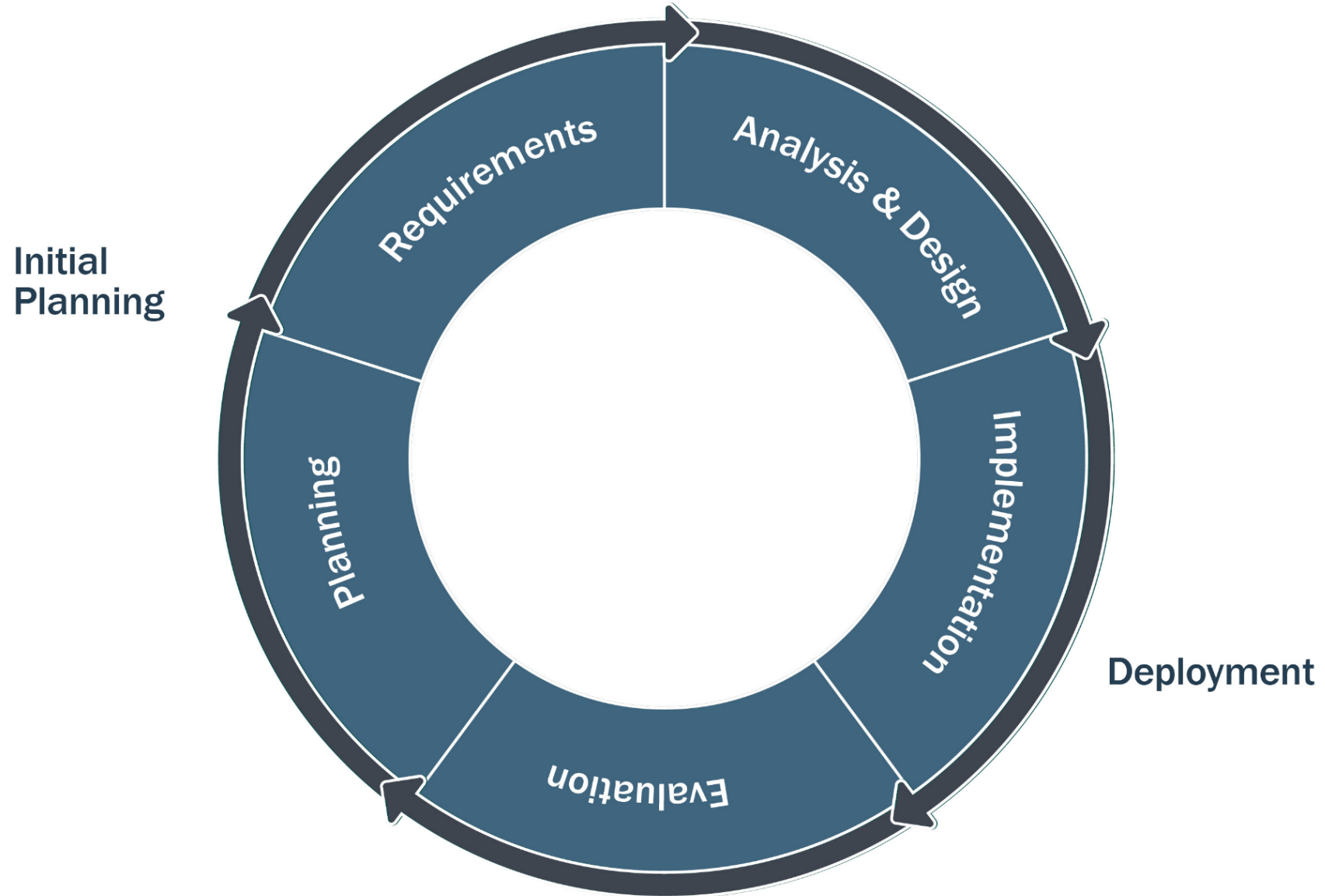
Todd Waits  
Aaron Volkmann



# Waterfall



# Agile



# Business



# Water-

Jez Humble, [https://youtu.be/L1w2\\_AY82WY](https://youtu.be/L1w2_AY82WY)

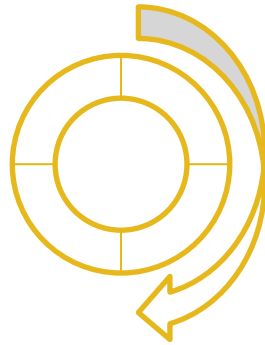
Dave West, <http://sdtimes.com/analyst-watch-water-scrum-fall-is-the-reality-of-agile/>

# Business



# Water-

# Development



# Scrum-

Jez Humble, [https://youtu.be/L1w2\\_AY82WY](https://youtu.be/L1w2_AY82WY)

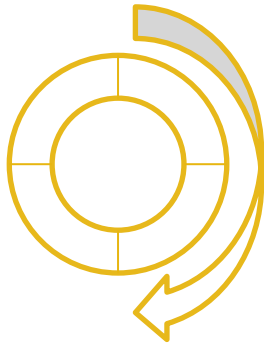
Dave West, <http://sdtimes.com/analyst-watch-water-scrum-fall-is-the-reality-of-agile/>

## Business



# Water-

## Development



# Scrum-

## QA & Operations



# Fall

Jez Humble, [https://youtu.be/L1w2\\_AY82WY](https://youtu.be/L1w2_AY82WY)

Dave West, <http://sdtimes.com/analyst-watch-water-scrum-fall-is-the-reality-of-agile/>



# DevOps

**Business Needs**

**Shared Goals**

**Collaboration**

# DevOps Culture

No Blame

# DevOps Culture

No Blame

Transparency

# DevOps Culture

No Blame

Transparency

Reduce Waste

# DevOps Culture

No Blame

Transparency

Reduce Waste

Goals and Objectives  
aligned with Business  
Needs

# DevOps Culture

No Blame

Transparency

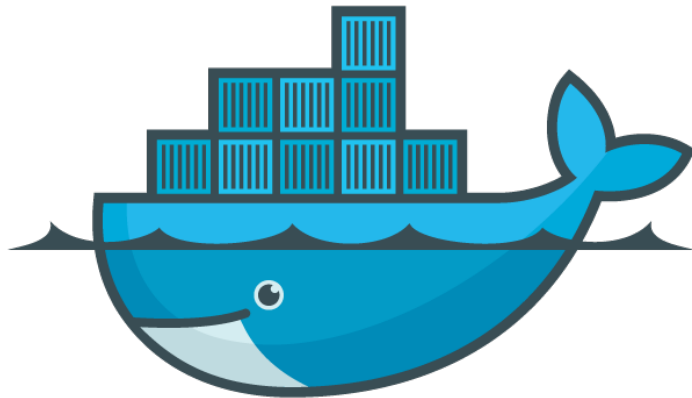
Reduce Waste

Goals and Objectives  
aligned with Business  
Needs

Integrated Efforts

# DevOps

≠



docker

# DevOps

≠





# DevOps

≠

# Jenkins



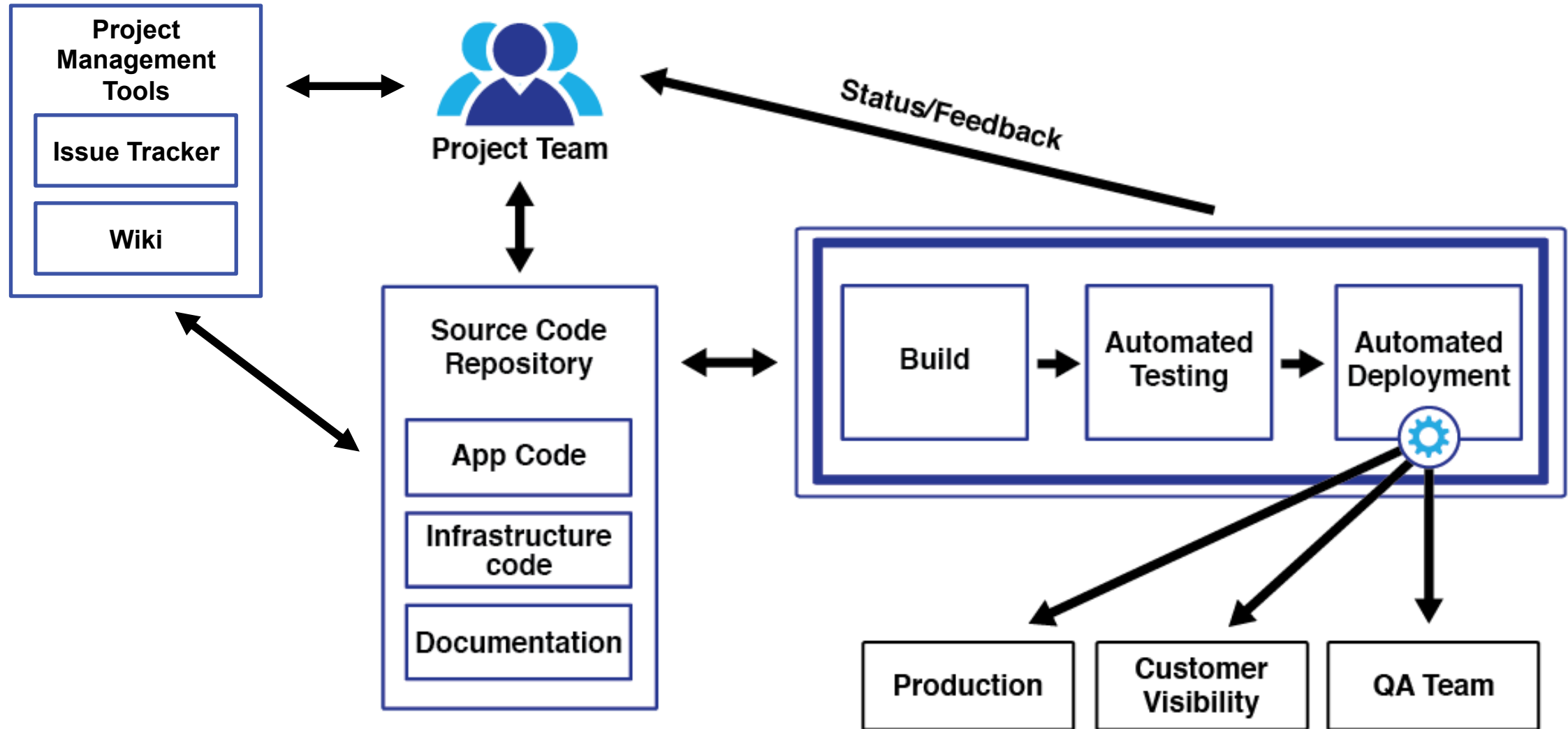
# DevOps is People



# People use tools



# Global Vision



# ChatOps

**(11:47:26 AM) TeamCity:** Build successful.

*PROJECT\_NAME::TEST CONFIGURATION*, agent WinAgent

<http://teamcity.url/viewLog.html?buildId=6677&buildTypeId=bt00>

# ChatOps

**(10:37:15 AM) Aaron:** The CSS style on the navbar is not overflowing correctly. I don't see a scroll bar.

**(10:37:26 AM) Todd:** Hmm... that's weird. Let me check the div.

**(10:38:58 AM) Todd:** devbot newcase "No scrollbar on navbar overflow"

**(10:38:59 AM) DevBot:** Case Created: 6024 "No scrollbar on navbar overflow" <http://issuetracker.internal.local/default.asp?6024>

**(11:42:06 AM) Todd:** devbot start 6024

**(11:42:06 AM) DevBot:** Todd working on Case 6024 <http://issuetracker.internal.local/default.asp?6024>

# You can't buy DevOps

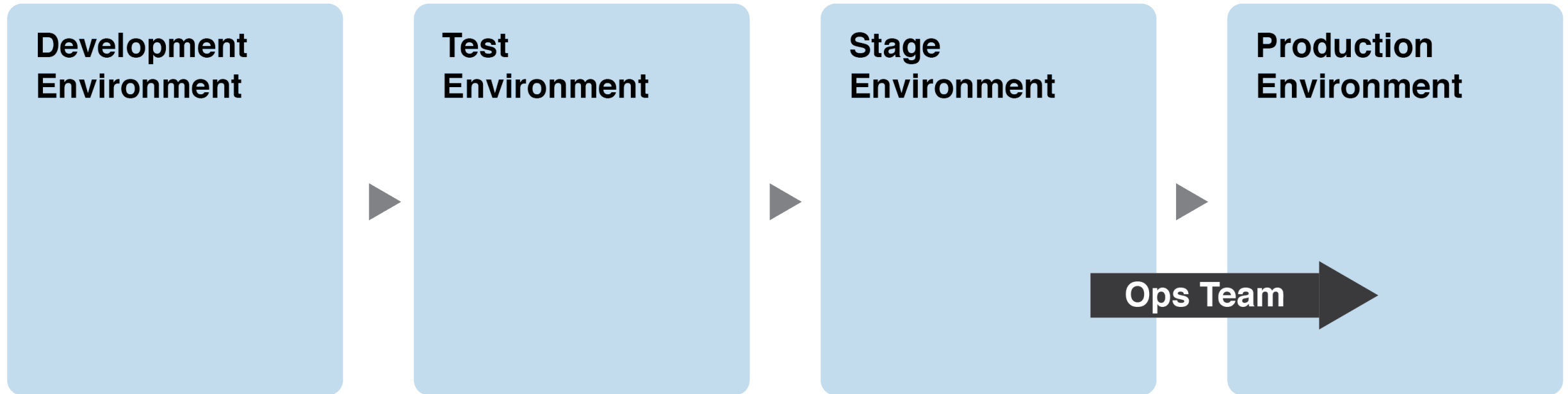
- Existing team members should be part of it
- DevOps teams can create new silos
- People should continue to be experts in their fields
- Teams should have members who cross train to interface with the other side

# DevOps Engineer

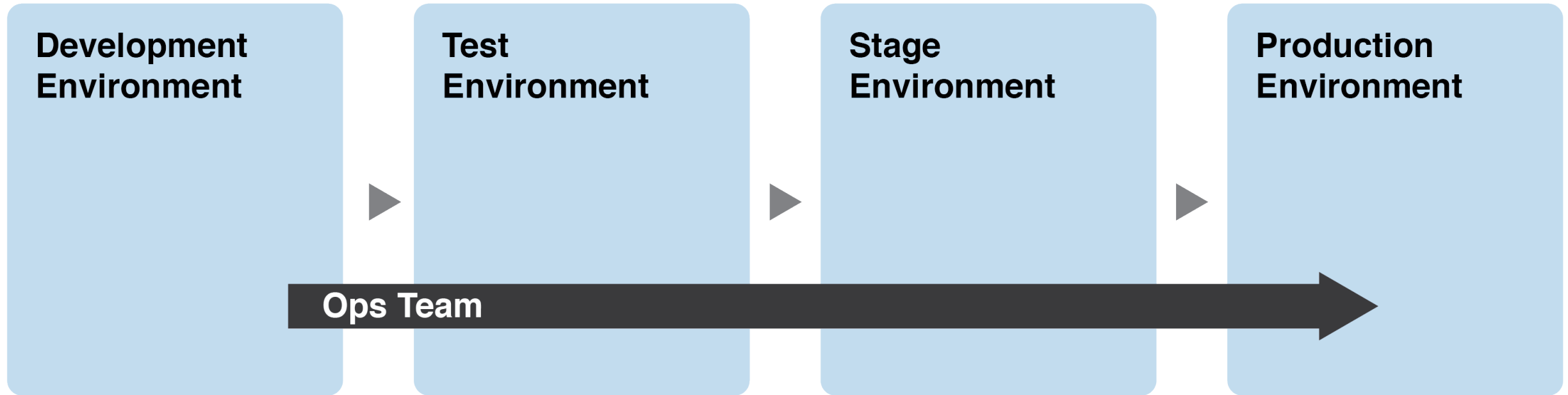
- Scrum Master-esque – but for tech side
- Help set up CI, CD
- Train team members
- How to convert legacy projects to new system



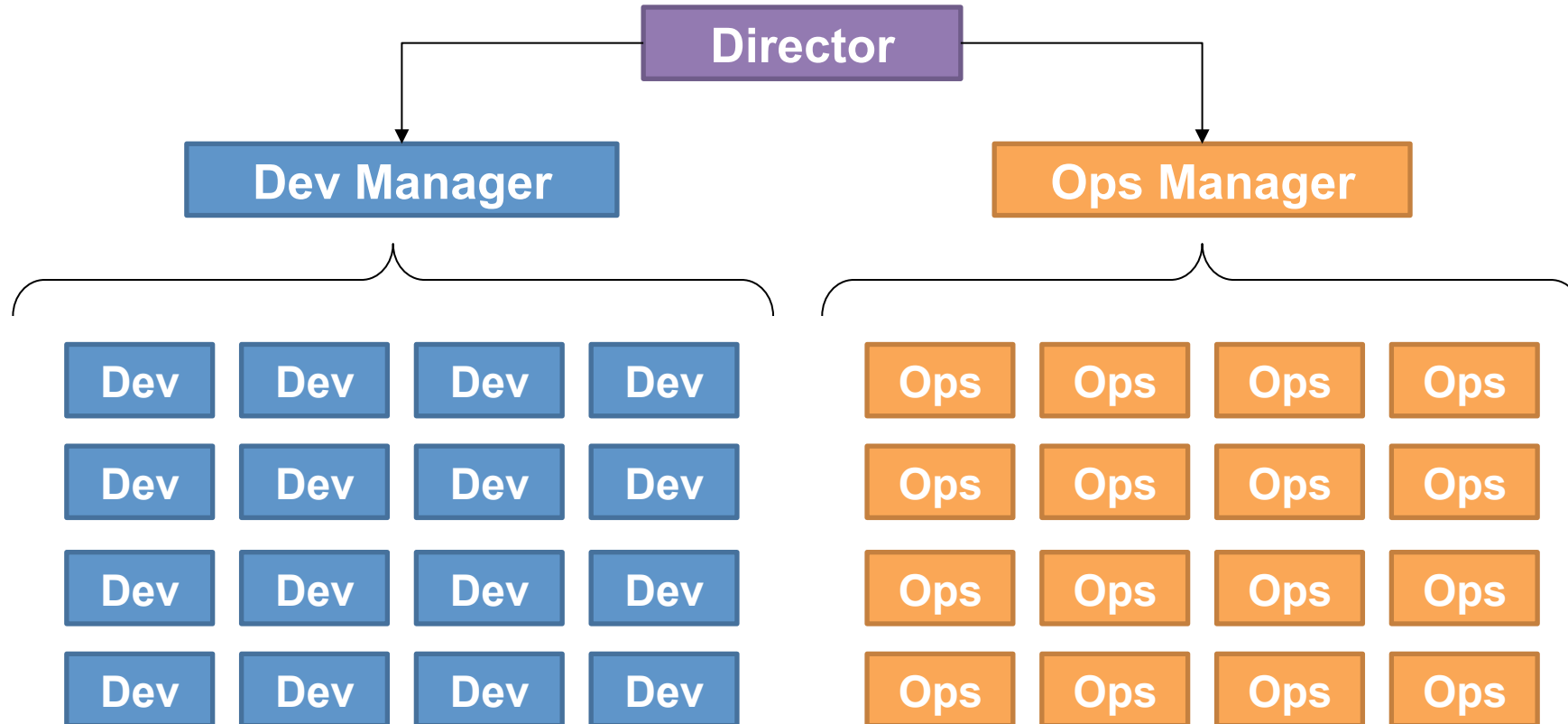
# Shift Left



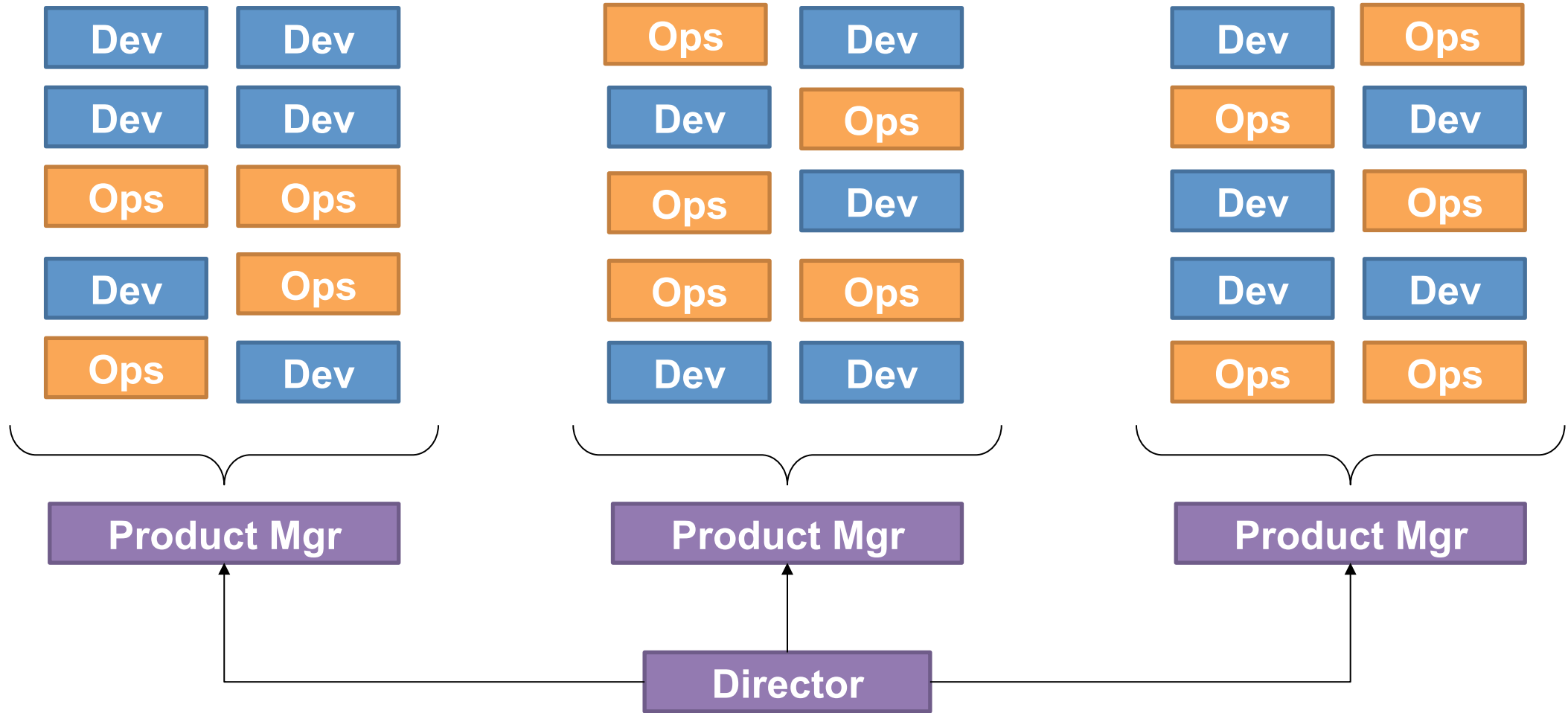
# Shift Left



# Org Structure



# Org Structure



# Culture Change is Hard

- Support from top leadership
- Identifying and addressing obstacles to adoption
- Rely on people closest to the work for guidance

# Q&A

## Join the new SEI DevOps Forum on LinkedIn

The screenshot shows the LinkedIn interface for the SEI DevOps Forum. At the top, there's a navigation bar with the LinkedIn logo, a search bar, and notification icons. Below that, a banner for a special meeting at Sheraton Phoenix Downtown is visible. The main content area features the group's name, 'SEI DevOps Forum', with a 'Join' button and '6 members' indicated. A 'Group Profile' section provides a description of the forum's purpose and its affiliation with the CERT Division at Carnegie Mellon University. To the right, an 'About this Group' box lists the creation date (March 25, 2015), group type (Professional Group), and owner (Shane McGraw). A 'Group Members in Your Network' section lists three members: Shane McGraw (1st), Hasan Yasar (2nd), and Todd Waits (2nd).