

# Carnegie Mellon University

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This material is based upon work funded and supported by the Department of Defense under Contract No. FA8721-05-C-0003 with Carnegie Mellon University for the operation of the Software Engineering Institute, a federally funded research and development center.

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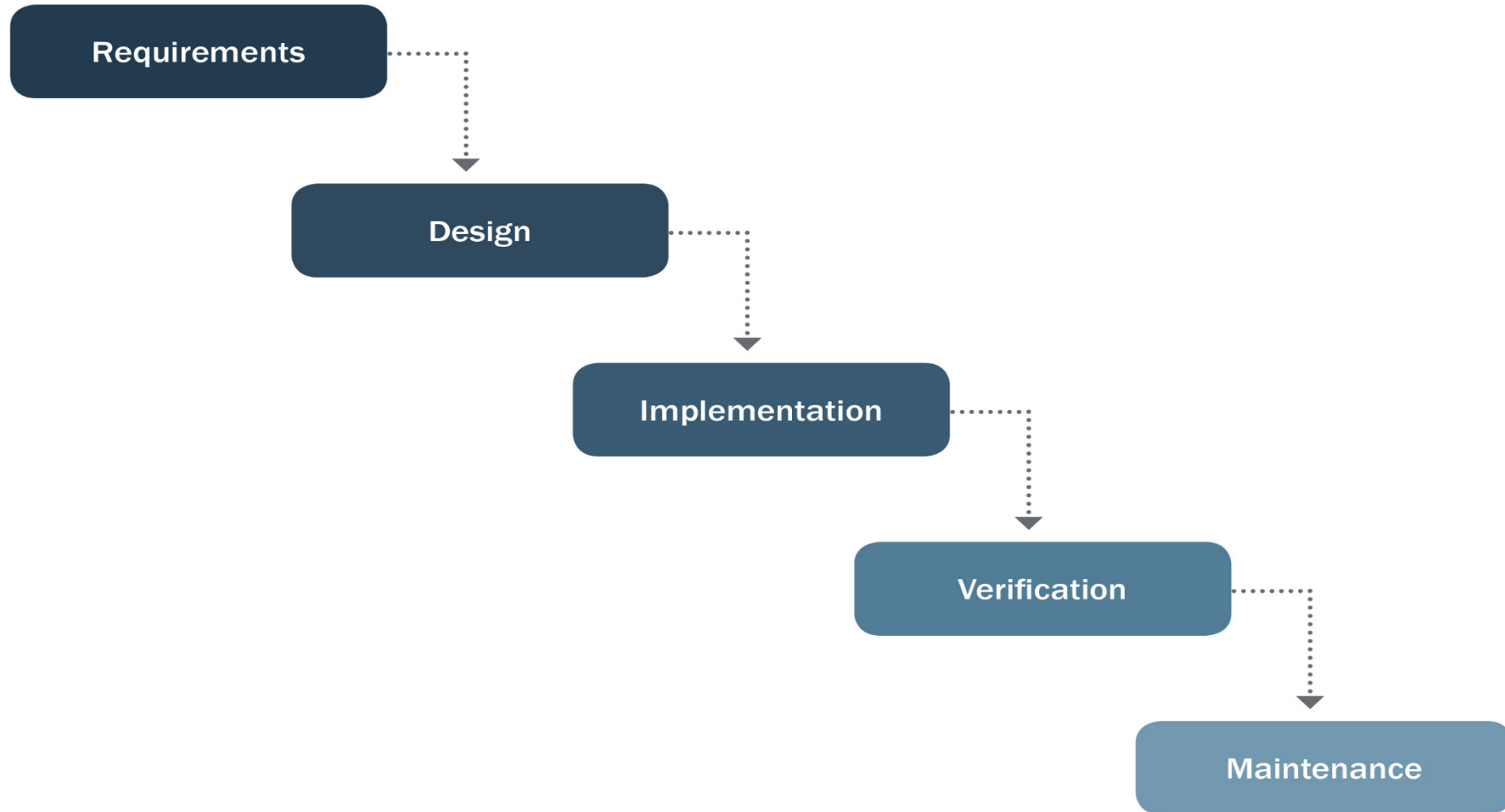
# Culture Shock: Unlocking DevOps Through Collaboration and Communication

Software Engineering Institute  
Carnegie Mellon University  
Pittsburgh, PA 15213

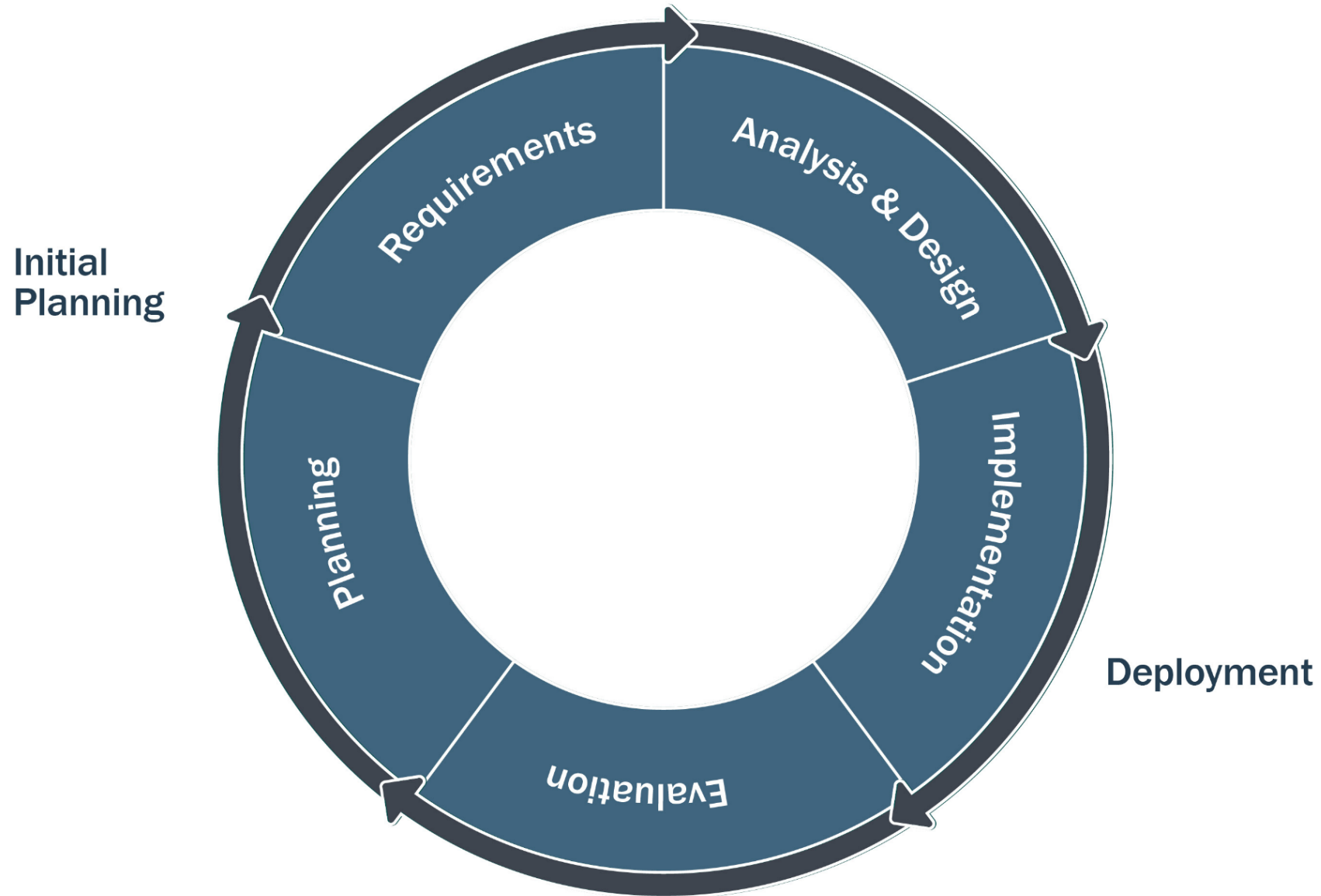
Todd Waits  
Aaron Volkmann



# Waterfall



# Agile



# Business



# Water-

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

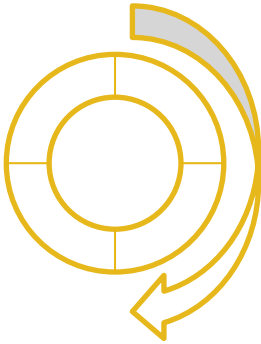
Dave West, <http://sdtimes.com/analyst-watch-water-scrum-fall-is-the-reality-of-agile/>

## Business



# Water-

## Development



# Scrum-

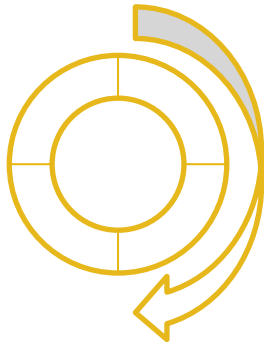
Jez Humble, [https://youtu.be/L1w2\\_AY82WY](https://youtu.be/L1w2_AY82WY)

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

## Business



## Development



## QA & Operations



# Water-

# Scrum-

# 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

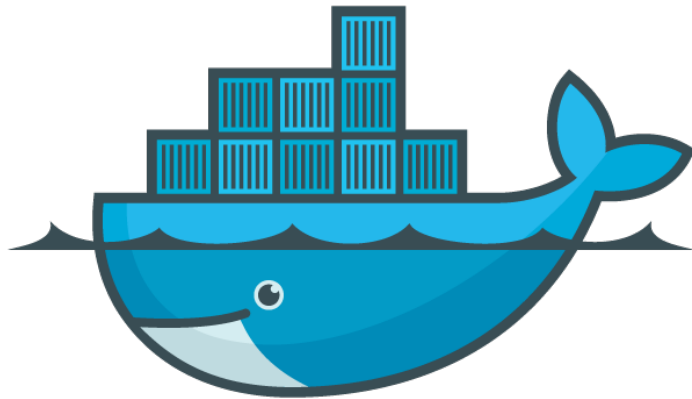
Reduce Waste

Goals and Objectives  
aligned with Business  
Needs

Integrated Efforts

# DevOps

≠



docker

# DevOps

≠





# DevOps

≠

# Jenkins



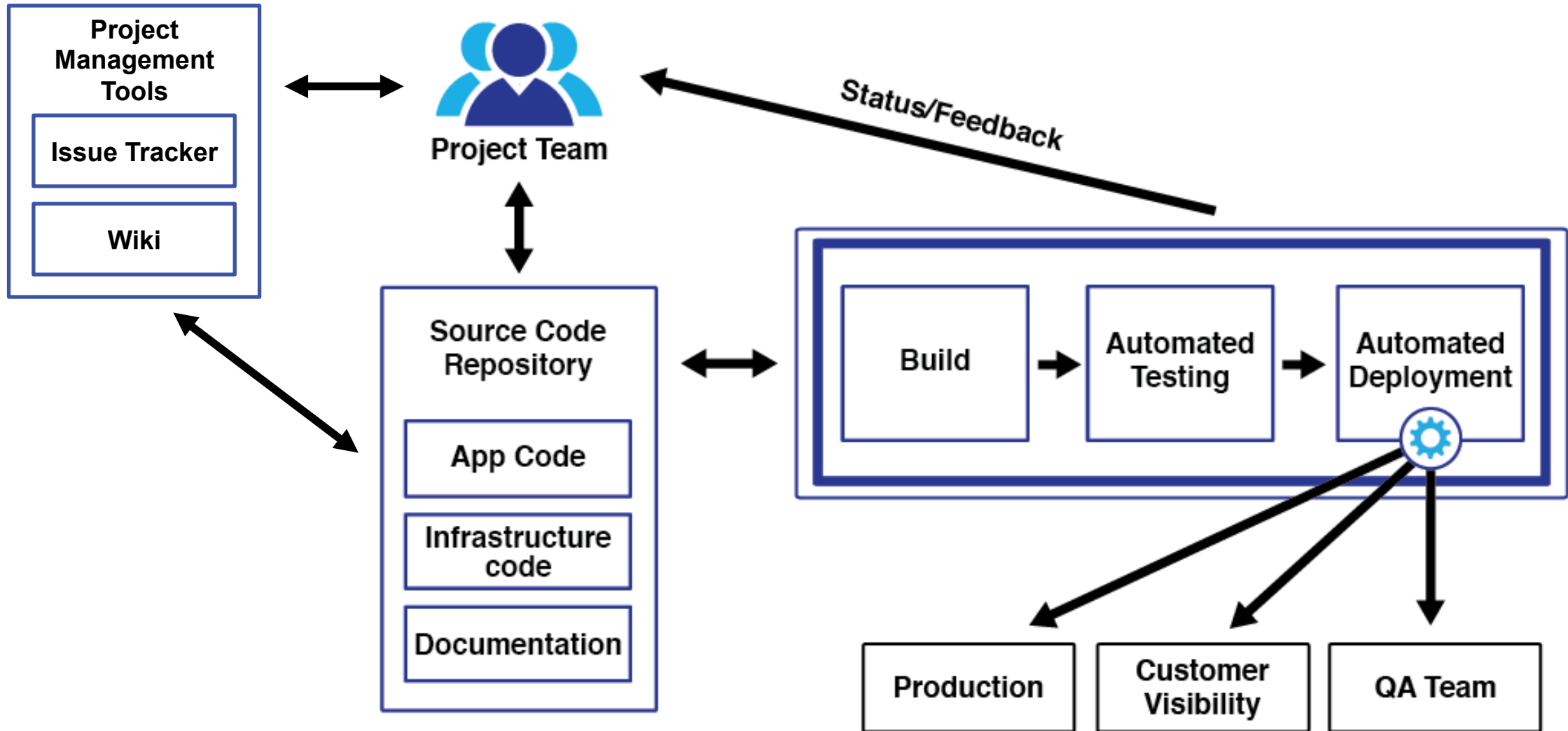
# DevOps is People



# 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

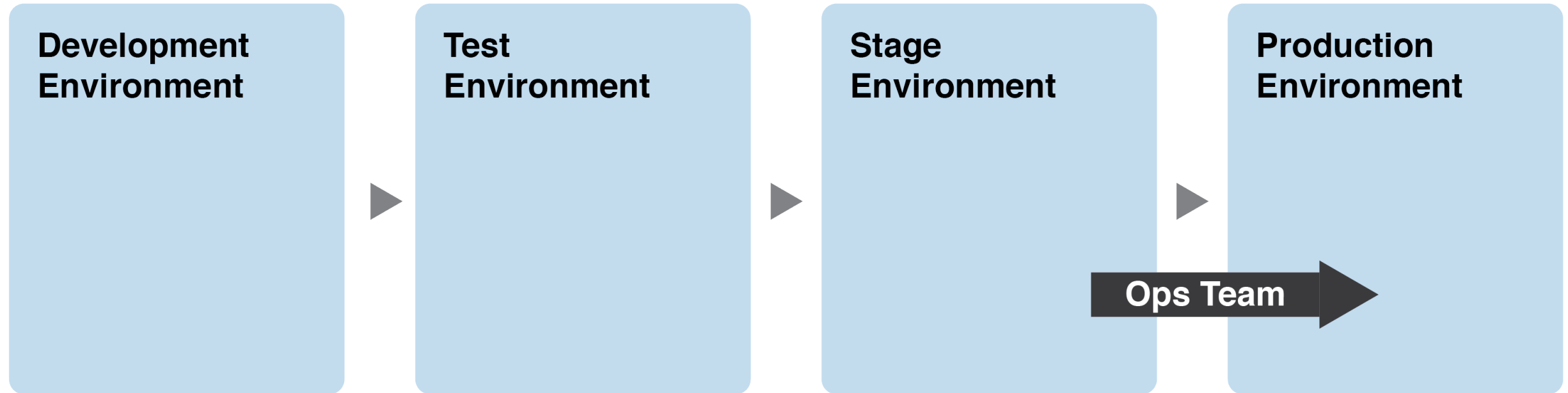
- Existing team members should be part of it
- DevOps teams can create new silos
- People should continue to be experts in their fields
- Teams should have members who cross train to interface with the other side

# DevOps Engineer

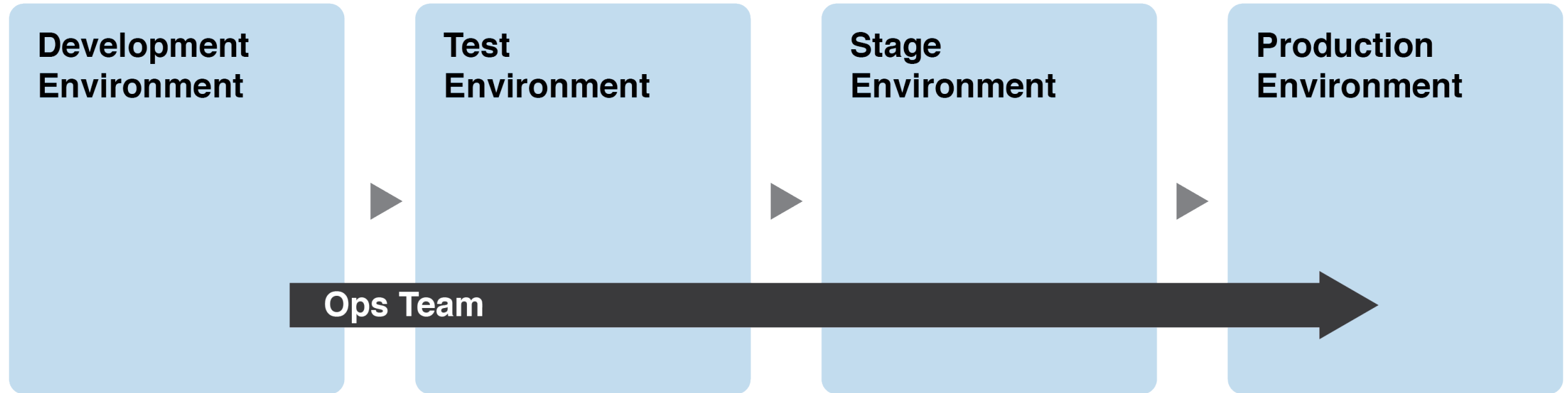
- Scrum Master-esque – but for tech side
- Help set up CI, CD
- Train team members
- How to convert legacy projects to new system



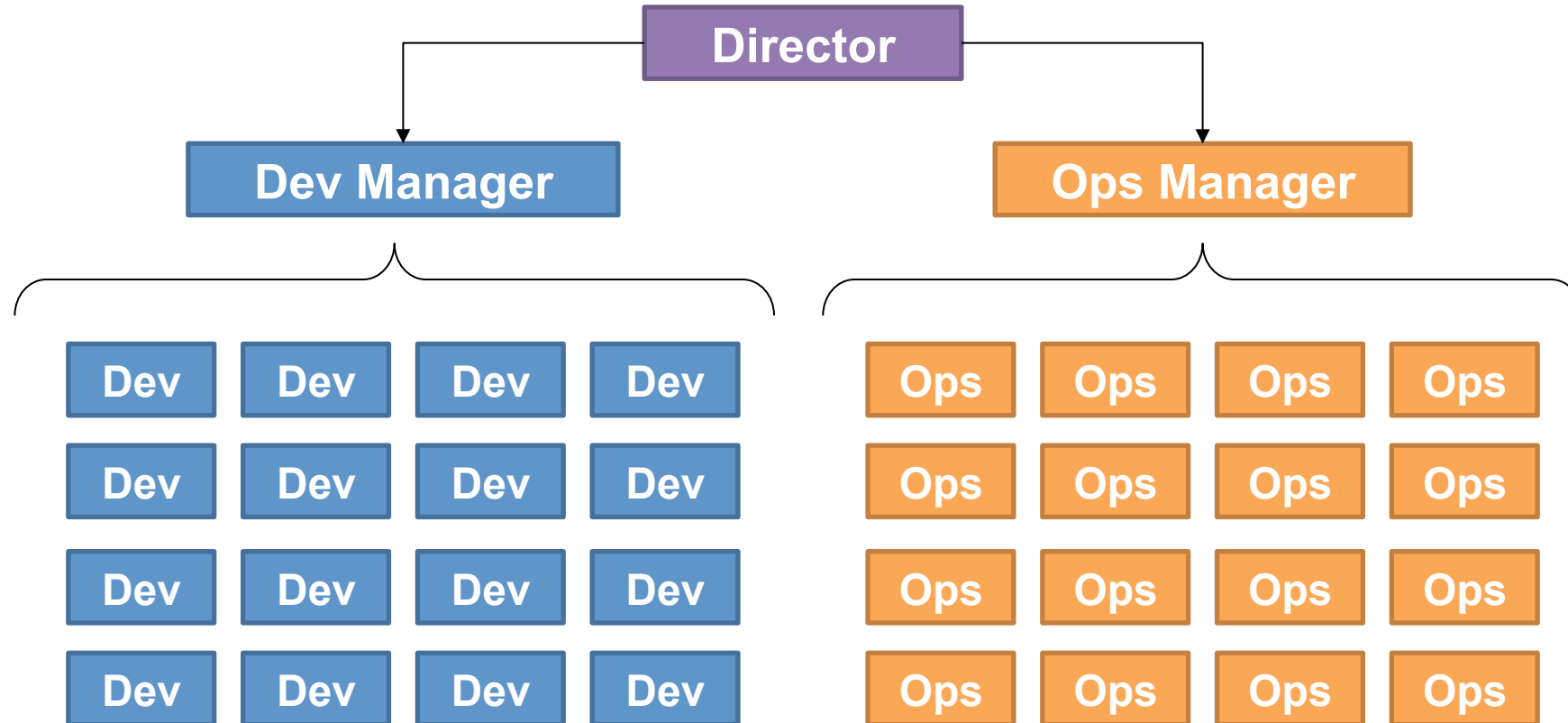
# Shift Left



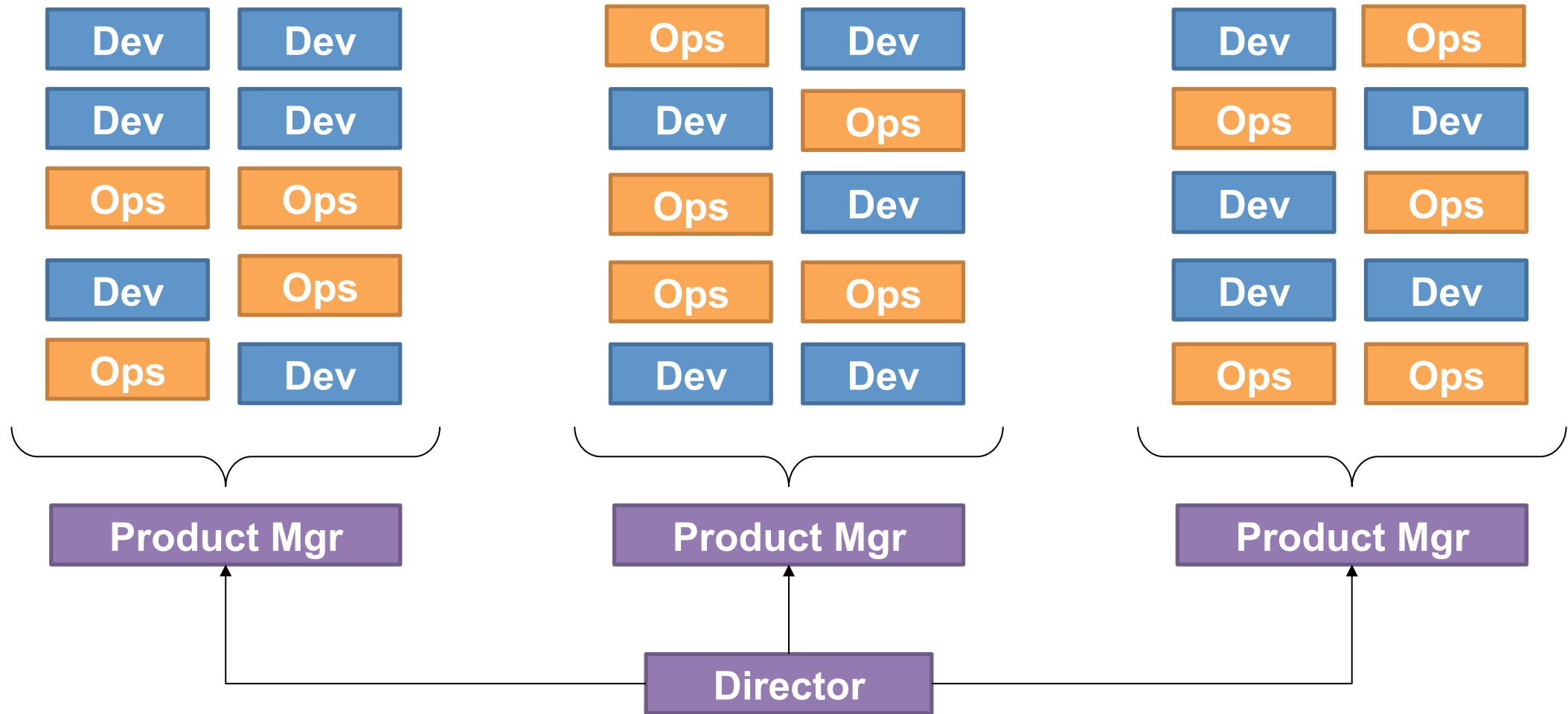
# Shift Left



# Org Structure



# Org Structure

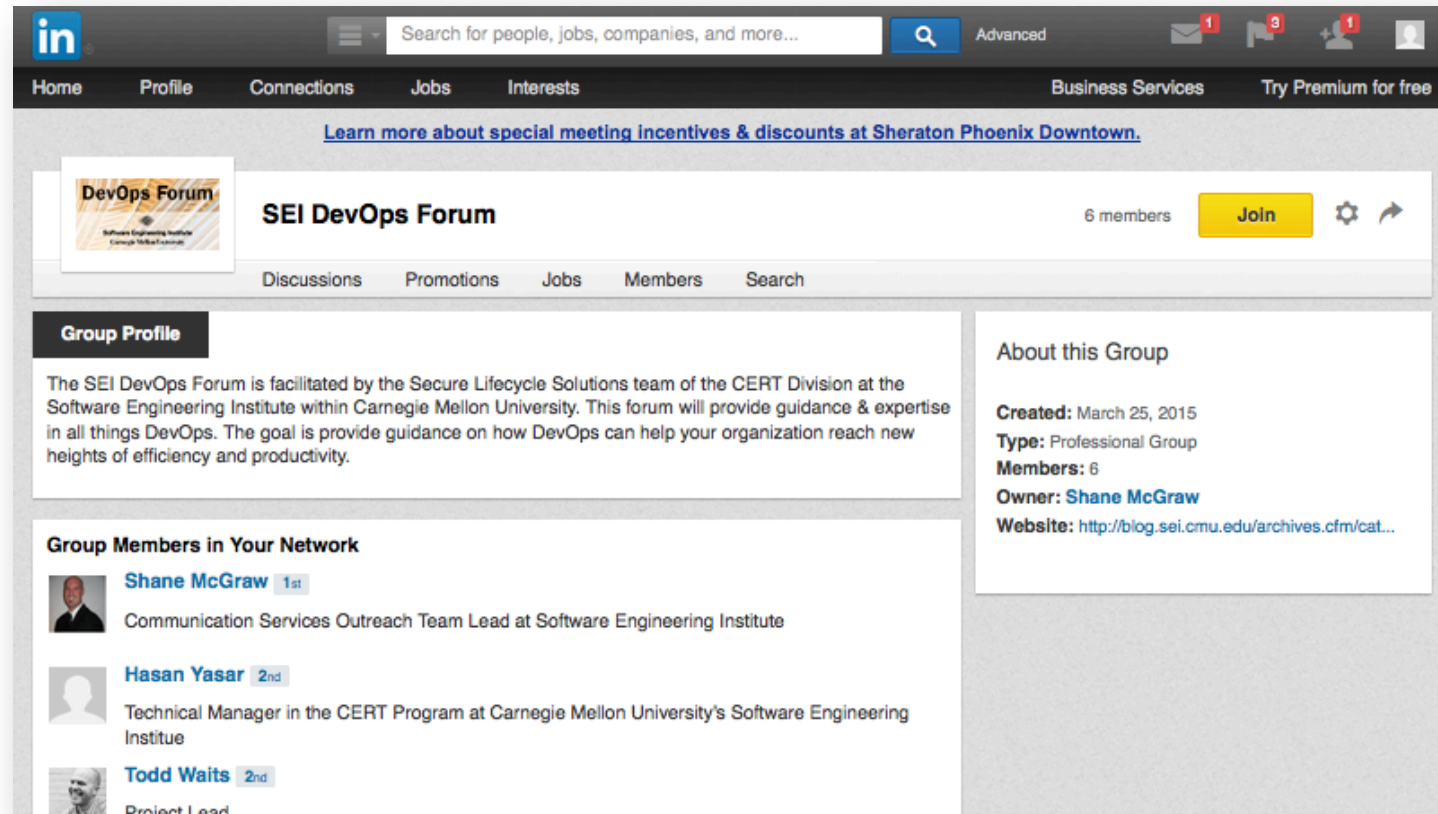


# Culture Change is Hard

- 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' group. At the top, the LinkedIn logo and navigation bar are visible. Below the navigation bar, a banner for the group is displayed. The group name 'SEI DevOps Forum' is prominently shown, along with the number of members (6) and a 'Join' button. Below the group name, there are tabs for 'Discussions', 'Promotions', 'Jobs', 'Members', and 'Search'. The 'Group Profile' section on the left provides a description of the forum, stating it is facilitated by the Secure Lifecycle Solutions team of the CERT Division at the Software Engineering Institute within Carnegie Mellon University. The 'About this Group' section on the right lists the creation date (March 25, 2015), type (Professional Group), members (6), owner (Shane McGraw), and website (http://blog.sei.cmu.edu/archives.cfm/cat...). The 'Group Members in Your Network' section lists three members: Shane McGraw (1st), Hasan Yasar (2nd), and Todd Waits (2nd), each with a profile picture and a brief description of their role.

**SEI DevOps Forum** 6 members [Join](#)

[Learn more about special meeting incentives & discounts at Sheraton Phoenix Downtown.](#)

**Group Profile**

The SEI DevOps Forum is facilitated by the Secure Lifecycle Solutions team of the CERT Division at the Software Engineering Institute within Carnegie Mellon University. This forum will provide guidance & expertise in all things DevOps. The goal is provide guidance on how DevOps can help your organization reach new heights of efficiency and productivity.

**Group Members in Your Network**

- Shane McGraw** 1st  
Communication Services Outreach Team Lead at Software Engineering Institute
- Hasan Yasar** 2nd  
Technical Manager in the CERT Program at Carnegie Mellon University's Software Engineering Institute
- Todd Waits** 2nd  
Project Lead

**About this Group**

**Created:** March 25, 2015  
**Type:** Professional Group  
**Members:** 6  
**Owner:** [Shane McGraw](#)  
**Website:** <http://blog.sei.cmu.edu/archives.cfm/cat...>