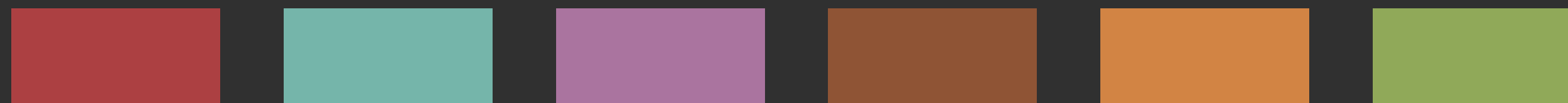


Building a Healthy DevOps Culture



Who am I?

- Tom Duffield
- Software Engineer with **Chef**
- DevOps Minneapolis Organizer
- DevOpsDays Minneapolis Organizer

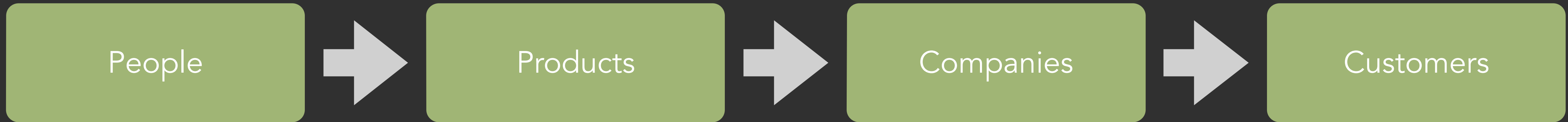
 tomduffield

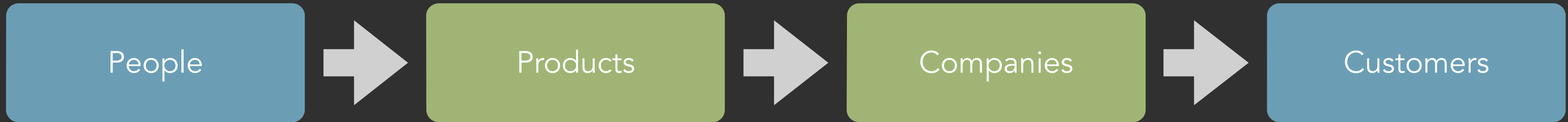
 tom@chef.io



DevOps is the clipped compound of "development" and "operations" that practitioners of DevOps use to describe the implementation of a set of principles that promote an alternative to traditional ideology and culture.

DevOps *starts* and *ends* with people.





CAMS

culture

automation

measurement

sharing

C

A

M

S

culture

automation

measurement

sharing

“You can't directly change culture. But you can change behavior, and behavior becomes culture.”

– *Lloyd Taylor, VP of Infrastructure for Ngmoco*

culture

automation

measurement

sharing

“You will design for the safety,
contentment, knowledge and freedom of
both your peers and your customers.”

– Adam Jacob, CTO for *Chef*

culture

automation

measurement

sharing

- Automation will only mature once you understand your culture.
- Your automation should complement your culture.
- The automation tools you choose are a reflection of your culture.

culture

automation

measurement

sharing

“If you can't measure, you can't improve.”

– *John Willis, Director of Ecosystem Development for Docker*

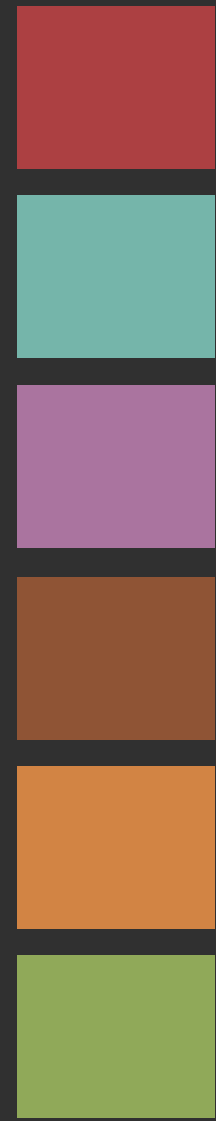
culture

automation

measurement

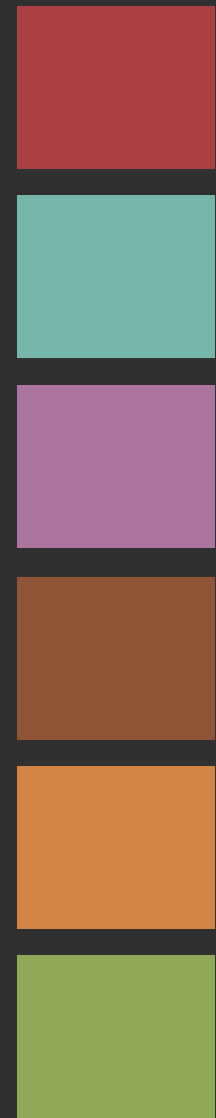
sharing

- It is critical to foster and develop a culture where people feel empowered to share.
- Share ideas, problems, tools, discoveries, lessons and failures both inside and outside the company.



Building Your DevOps Culture

Building Your DevOps Culture



- You will **seek diversity**.
- You will treat **failure as a learning** opportunity.
- You will operate (and experiment) in **small batch sizes**.
- You will practice **kaizen** (continuous improvement).
- You will not fear **kaikaku** (disruptive change).
- You will work to **eliminate waste** in your systems.

Building Your DevOps Culture

seek diversity

failure as learning

small batch sizes

kaizen

kaikaku

eliminate waste

Building Your DevOps Culture

seek diversity

failure as learning

small batch sizes

kaizen

kaikaku

eliminate waste

- Build teams to optimize for diversity in...
 - backgrounds
 - experiences
 - viewpoints
 - responsibilities
- Surround yourself with people who challenge your views. Say "no" to the "yes-man."

Building Your DevOps Culture

seek diversity

failure as learning

small batch sizes

kaizen

kaikaku

eliminate waste

- You can never prove anything without risking failure.
- Accept that you will always learn more from failure than you will from success.
- Learn to treat failure as a status quo event rather than an anomaly.
- Change the cultural response to failure.

Building Your DevOps Culture

seek diversity

failure as learning

small batch sizes

kaizen

kaikaku

eliminate waste

- Small, iterative changes allow you to:
 1. gather information quickly
 2. shorten the feedback loop
 3. minimize the impact of **failure**
- Decreases friction for experimentation by reducing up front resource investment.

Building Your DevOps Culture

seek diversity

failure as learning

small batch sizes

kaizen

kaikaku

eliminate waste

- Never be satisfied with the status quo. Always be looking for something to improve upon.
- Take advantage of the quick feedback cycles generated by your **small batch sizes** along with the **lessons learned from failures**.
- When in doubt, look to improve upon the safety, contentment, knowledge and freedom of your peers and customers.

Building Your DevOps Culture

seek diversity

failure as learning

small batch sizes

kaizen

kaikaku

eliminate waste

- There will be times when you need to make decisions that drastically alter the way in which you work.
- It will be scary but it just takes **practice**.
- Drastic does not necessitate a Big Bang. Drastic changes can still be made in **small batch sizes**.

Building Your DevOps Culture

seek diversity

failure as learning

small batch sizes

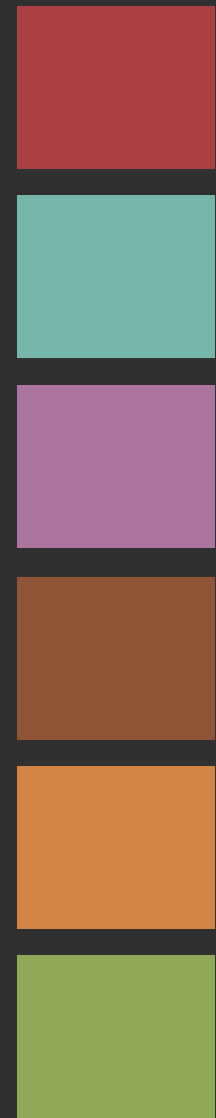
kaizen

kaikaku

eliminate waste

- Ask yourself: *What are the things that I don't need to be doing? Does this action add value?*
- Are there manual processes that can be eliminated? If not, can they be automated?
- If you think something is wasteful, **try an experiment** and **remove it**. If you find out you were wrong, share what you have **learned**.

Building Your DevOps Culture



- You will **seek diversity**.
- You will treat **failure as a learning** opportunity.
- You will operate (and experiment) in **small batch sizes**.
- You will practice **kaizen** (continuous improvement).
- You will not fear **kaikaku** (disruptive change).
- You will work to **eliminate waste** in your systems.

Resources

Resources

Books

Talks

Podcasts

Local

- Phoenix Project
by Gene Kim, Kevin Behr and George Spafford
- Lean Startup
by Eric Ries
- Lean Enterprise
by Jez Humble and Joanne Molesky
- Continuous Delivery
by Jez Humble and David Farley

Resources

Books

Talks

Podcasts

Local

- Chef Style DevOps Kungfu
by Adam Jacob - https://youtu.be/_DEToXsgrPc
- DevOps Culture and Practices to Create Flow
by Jez Humble - <https://youtu.be/oX8af9kLhIk>
- Why We Need DevOps?
by Gene Kim - https://youtu.be/877OCQA_xzE
- Conway's Law: The Skeleton of DevOps
by Dan Slimmon - <https://vimeo.com/101220166>

Resources

Books

Talks

Podcasts

Local

- Arrested DevOps
Matt Stratton, Trevor Hess, Bridget Kromhout - <http://arresteddevops.com>
- DevOps Café
John Willis, Damon Edwards - <http://devopscafe.org>
- The Goat Farm
Michael Ducey, Ross Clanton - <http://goatcan.do>
- The Ship Show
J. Paul Reed, Various - <http://theshipshow.com>

Resources

Books

Talks

Podcasts

Local

- DevOps Minneapolis Meetup
1st Monday of every month - <http://meetup.com/DevOps-Minneapolis>
- DevOpsDays Minneapolis
July 20-21, 2016 - <http://devopsdays.org>

Thank You

 [tomduffield](#)

 tom@chef.io

Sources

- DevOps Culture (Part 1)
<http://itrevolution.com/devops-culture-part-1>
- Chef Style DevOps Kungfu - ChefConf2015 Keynote
https://youtu.be/_DEToXsgrPc
- What DevOps Means to Me
<https://www.chef.io/blog/2010/07/16/what-devops-means-to-me>
- Can You Solve This? (The Number Game)
<https://www.youtube.com/watch?v=vKA4w2O61Xo>