



Road to DevOps:

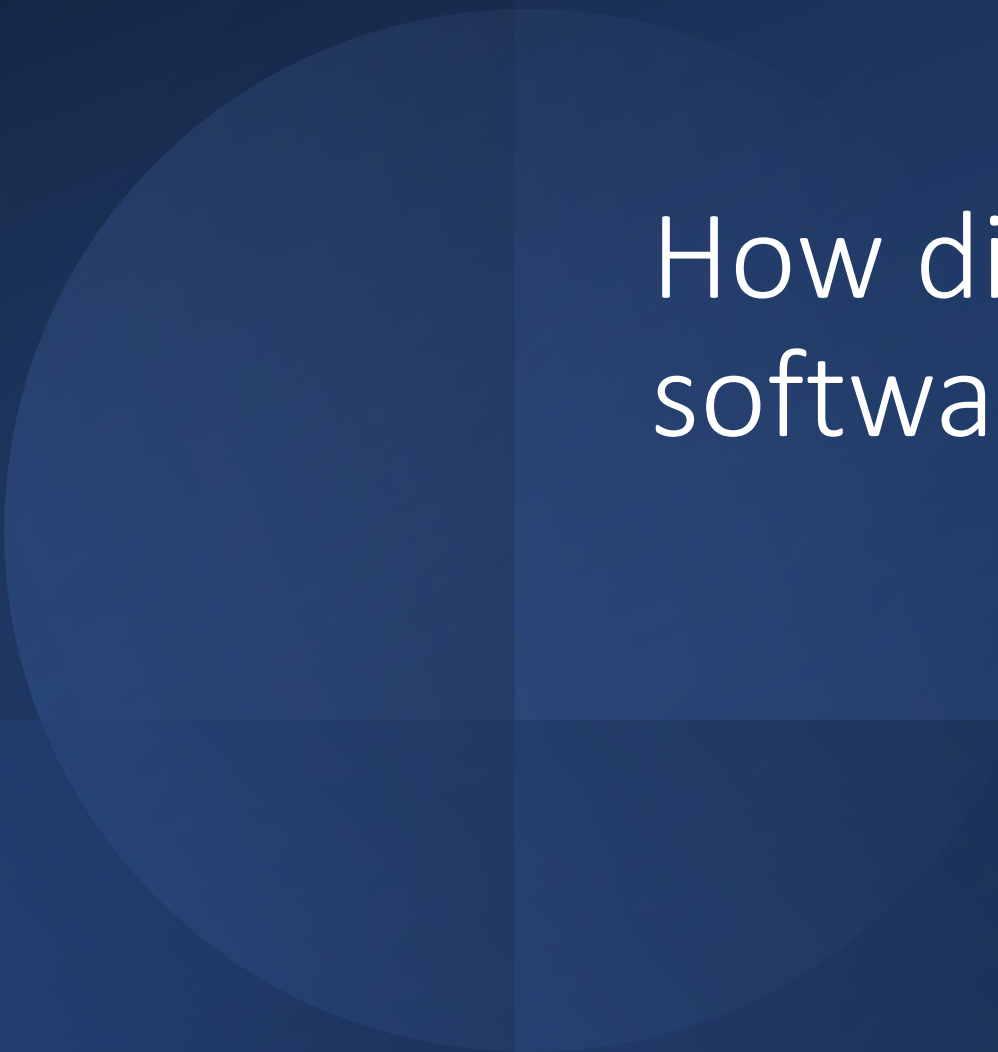
Are we ready for transformation?

Mustafa Toroman

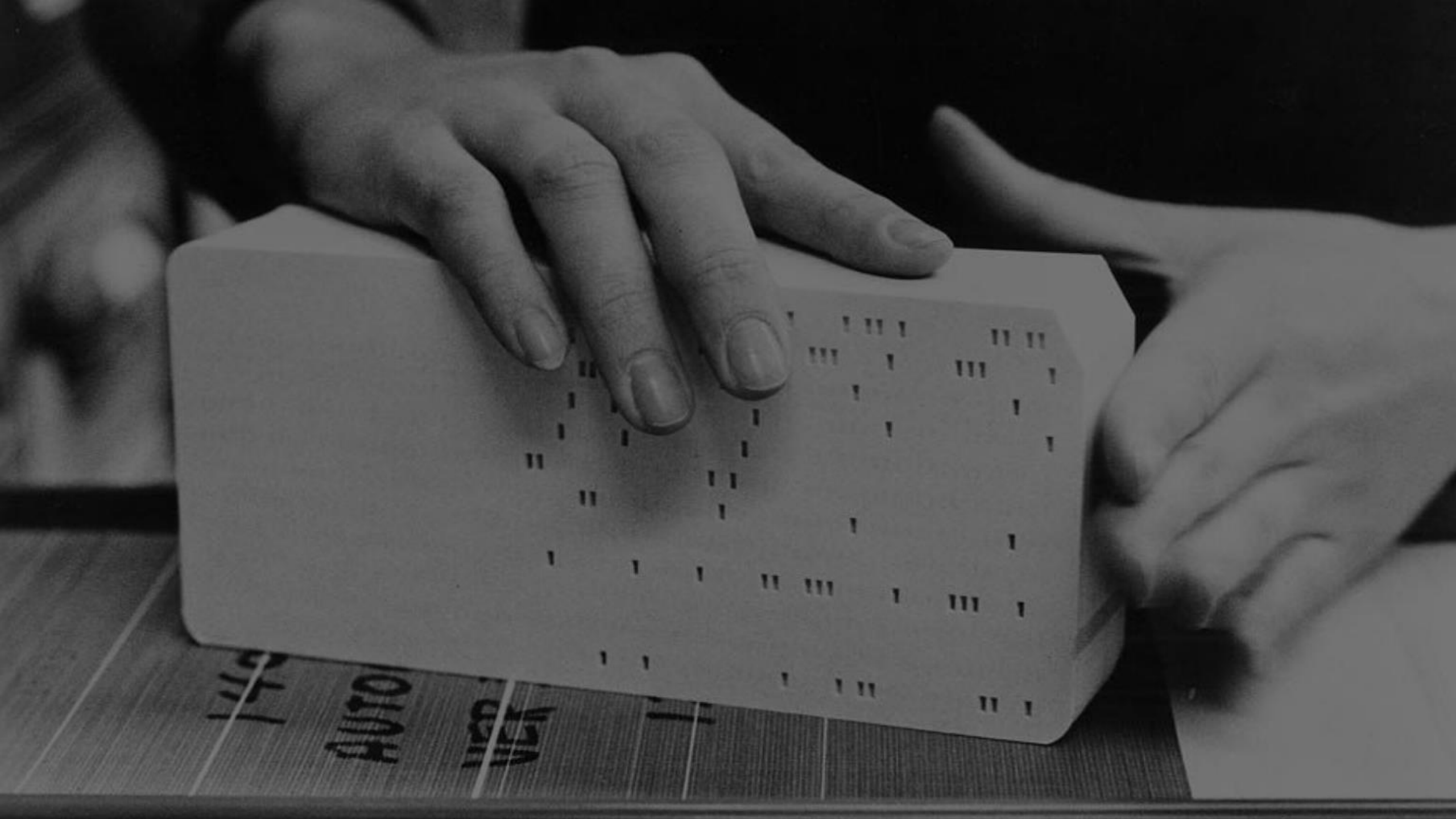
Mustafa Toroman

- Solution Architect @ CLOUDEON – part of Devoteam
- @toromust
- Microsoft Azure MVP, C# Corner MVP, DOI ambassador





How did we deliver
software in the past?



EC5274 SS/SD
ИЗОТ
СДЕЛАНО В БОЛГАРИИ





Bill Gross ✓

@Bill_Gross

Follow



In the "I'm getting old" department.., a kid saw this and said, "oh, you 3D-printed the 'Save' Icon."



11:48 PM - 17 Oct 2017

PERSONALNI **računari**



78

CENA 250 D.

JANUAR
1992.

SOFTVER

**ANIMATOR PRO
WATCOM 386 8.0
NORTON DESKTOP
FOR WINDOWS
GRAFIČKA BIBLIOTEKA
ZA CLIPPER**

NOTEBOOK

**DAEWOO 386S
DELL 320N**

SPECIJALNI DODATAK NA 32 STRANE

KAKO KUPITI RAČUNAR

SAVETNIK ZA IZBOR I NABAVKU OPREME



ŠTAMPAČI

**EPSON LQ 570
EPSON LQ 870
HP DESKJET 500**





LINKS

WEBSITE

DESIGN

CREATIVITY

SOFTWARE

WWW

NETWORK

**VIRTUAL
COMUNITY**

PARTICIPATION

**WEB
LOGS**

CONTENT

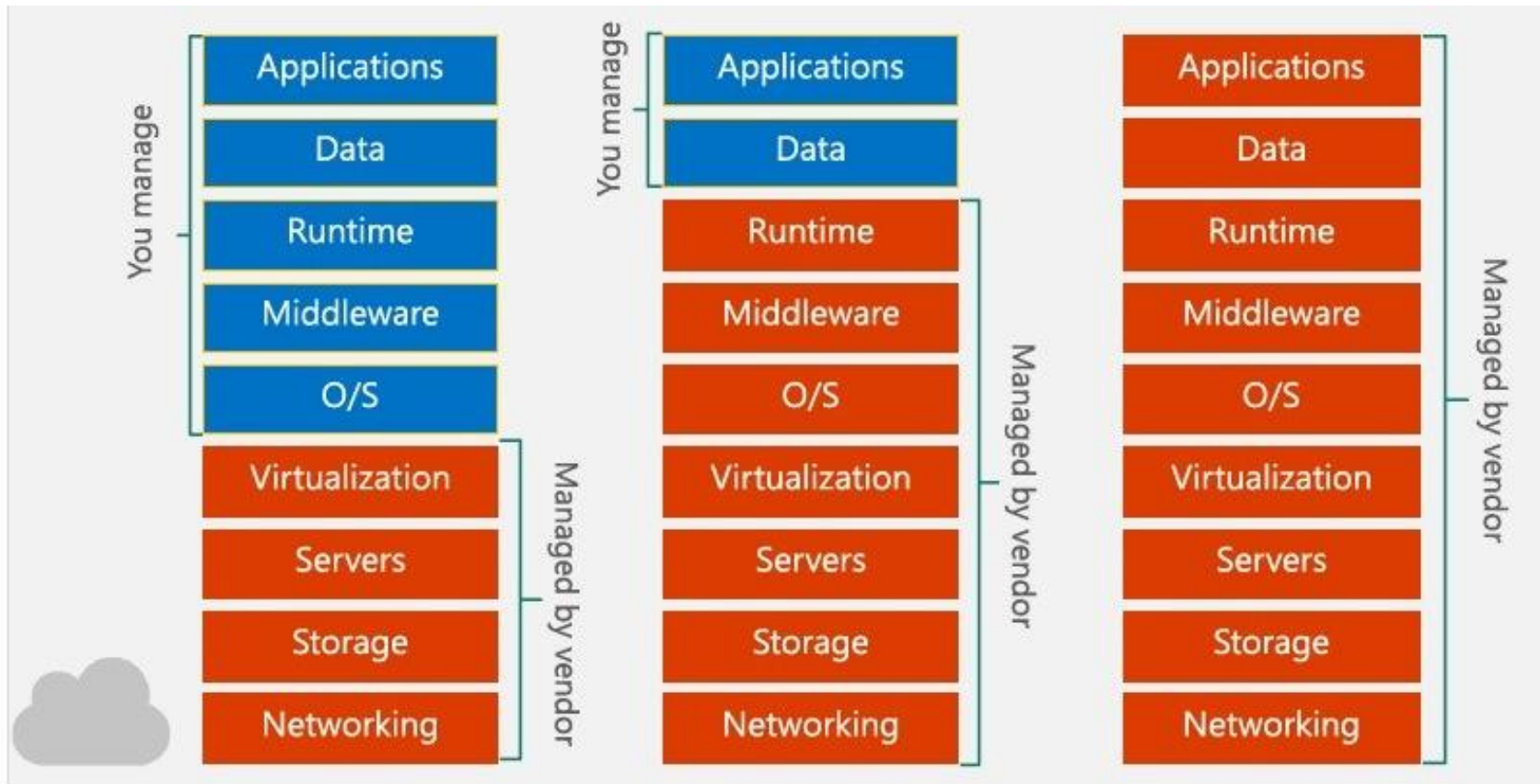
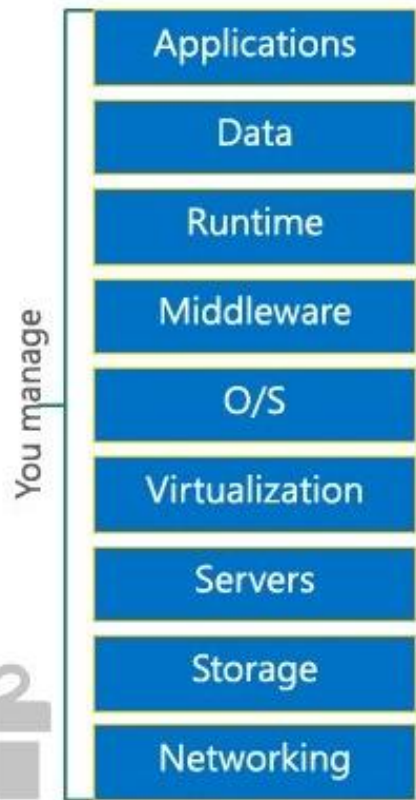
WEB 2.0

**SOCIAL
MEDIA**

WIKIS

AUDIO

**WEB
2.0**

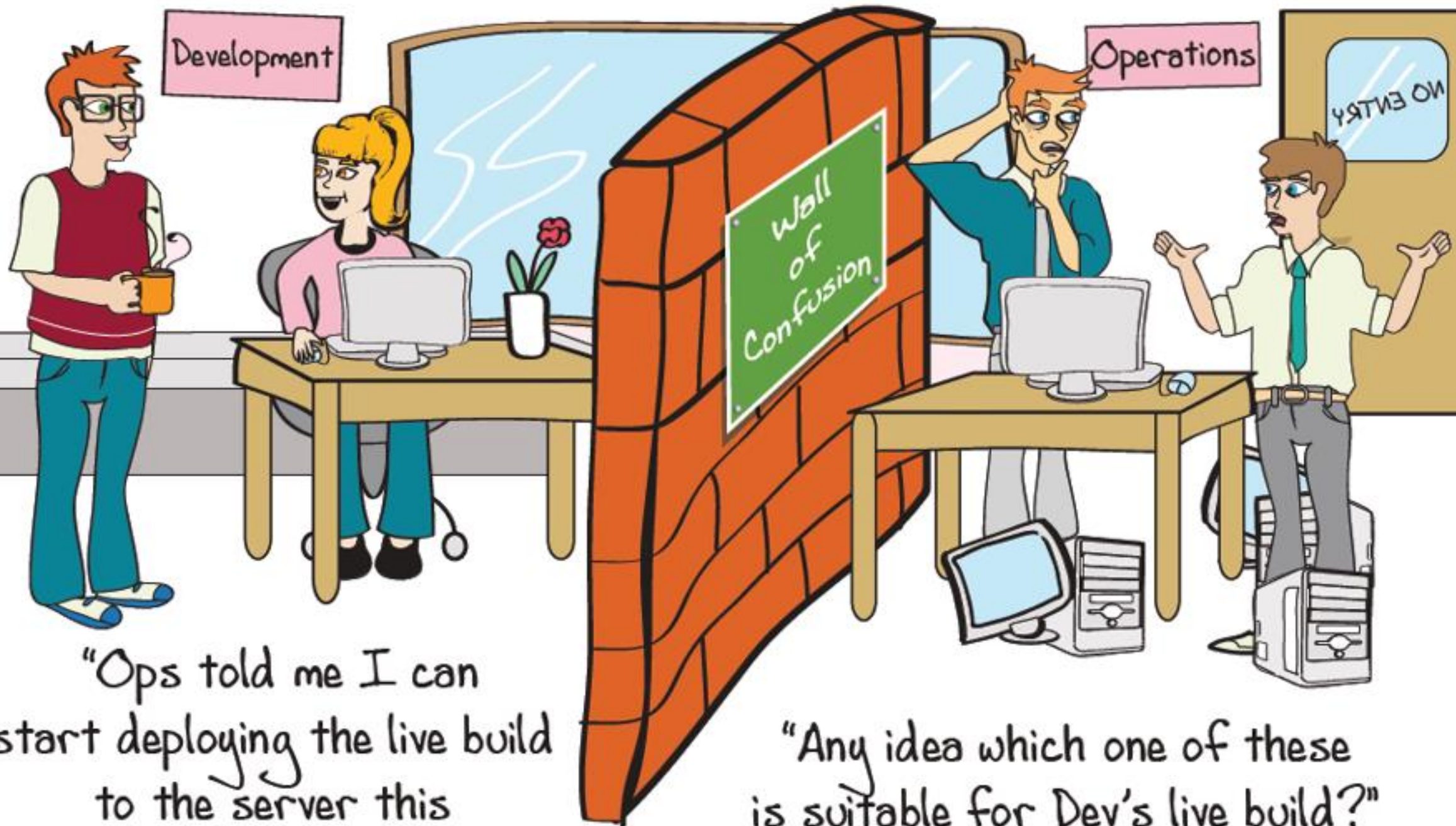




SaaS

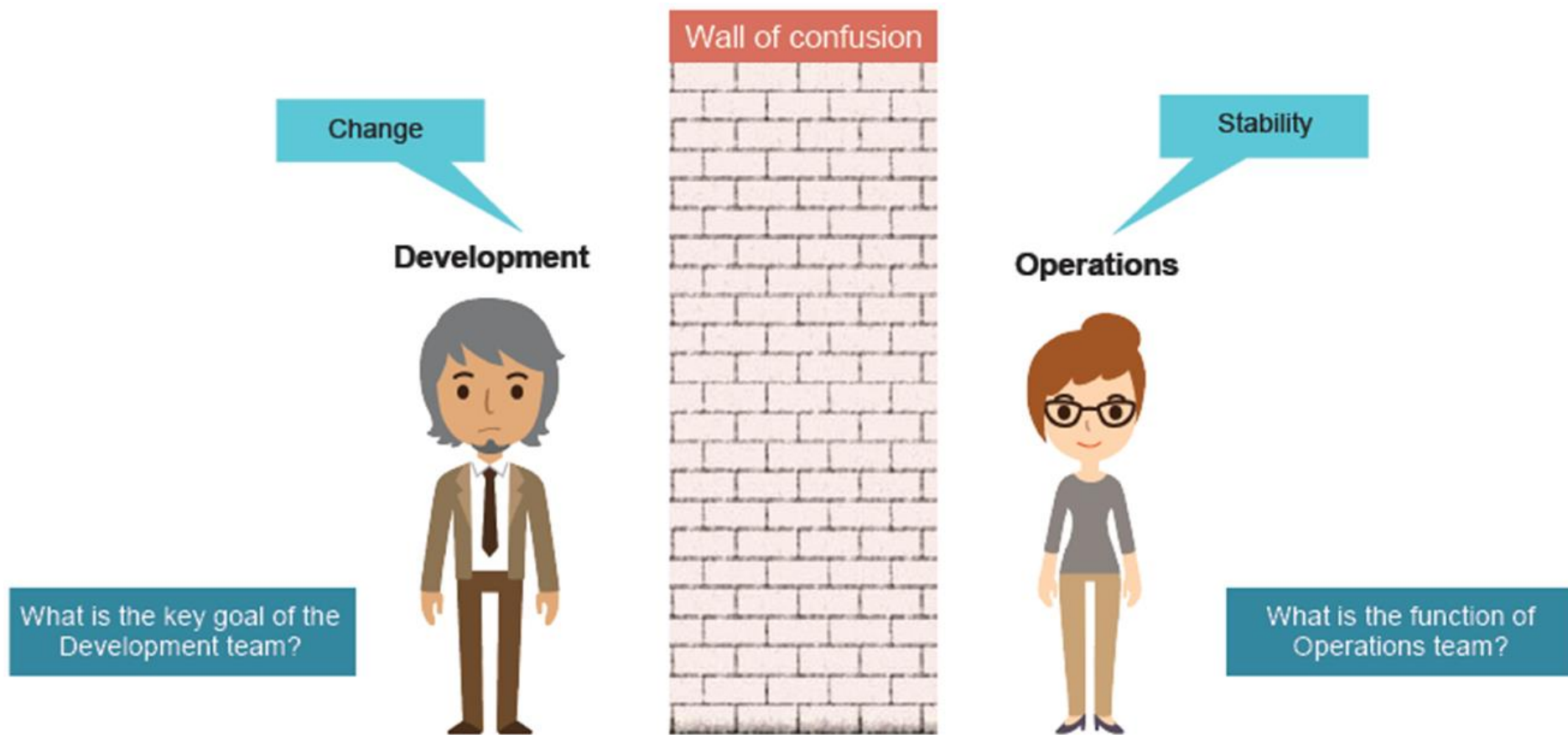


Issues?



"Ops told me I can start deploying the live build to the server this afternoon!"

"Any idea which one of these is suitable for Dev's live build?"



Us or them?

"It works on my machine..."

- Dev

"It's not the server, it's your code."

- Ops

"6 days after successful deployment, Server experiences high load. "

- Dev or Ops?

"Software is deployed to test environment.

- Dev or Ops?
You can't log into application "

"There is an issue with build server.

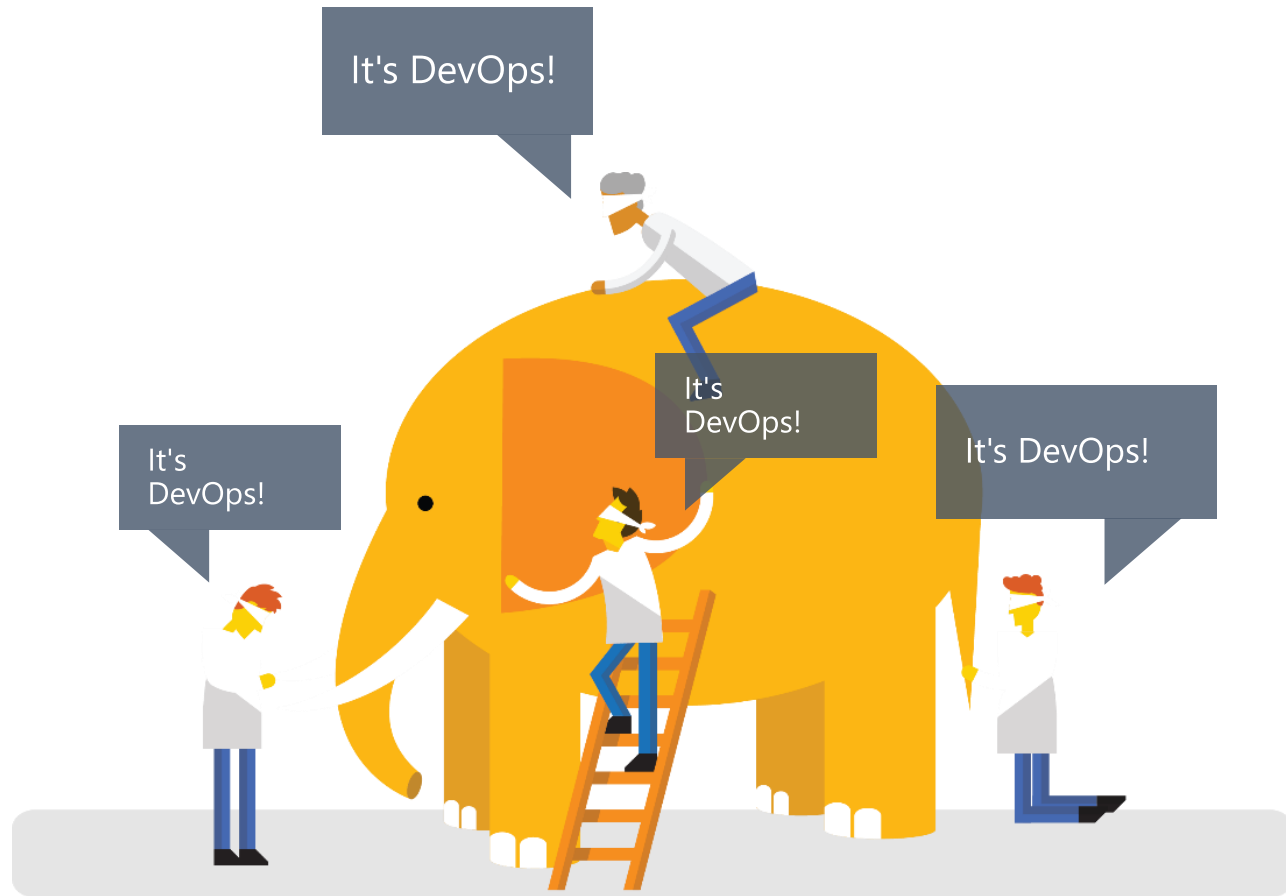
- Dev or Ops?
The Code doesn't build. "

Dev and Ops problems – TODAY!

- There is no formalized “Handover” Between Two Teams
- Operations is facing with problems in the Production
- Organization “Silos” – Isolated Work (“We” – “They”)
- Development is all about “new things” (change), and Operations worries that “all works” (stability)
- Different Tools
- Disinterest for Other Team
- Different environment (DEV-TEST-PROD)
- Blame Game
- Different Processes (Scrum, ITIL, Waterfall....)

Solution?





What is DevOps anyway?

- "DevOps is the union of people, process, and products to enable continuous delivery of value to our end users."

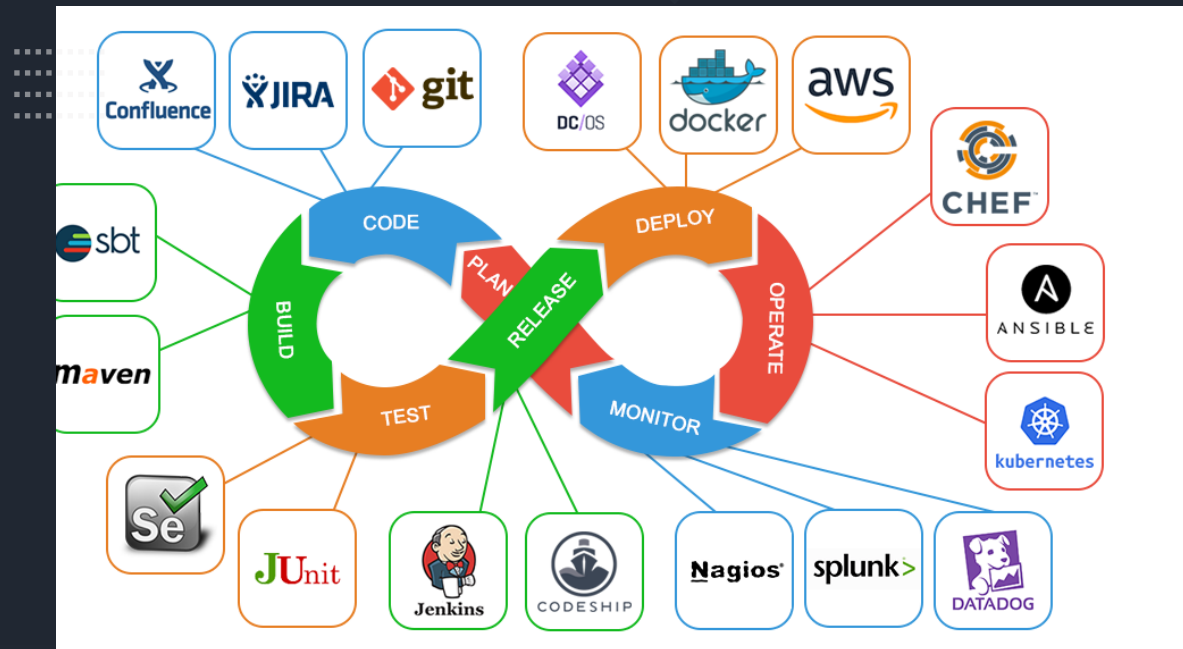
-Donovan Brown

What is DevOps anyway?

- DevOps is primarily:
 - New culture
 - New way of thinking

What is DevOps anyway?

- Automation – Automate EVERYTHING



What is DevOps anyway?

Continuous Integration

Continuous Integration usually refers to integrating, building, and testing code within the development environment.

Martin Fowler

“Continuous Delivery is **about putting the release schedule in the hands of the business, not in the hands of IT**. Implementing Continuous Delivery means making sure your software is always production ready **throughout its entire lifecycle** – **that any build could potentially** be released to users at the touch of a button using a fully automated process in a matter of seconds or minutes.

Continuous Deployment

Continuous Deployment is subtly different to Continuous Delivery in that release are automatically pushed into production when all tests pass. In Continuous Delivery release is a human decision.

Source: Dave Farley

COMPANY	DEPLOY FREQUENCY	DEPLOY LEAD TIME	RELIABILITY	CUSTOMER RESPONSIVENESS
Amazon	23,000/day	minutes	high	high
Google	5,500/day	minutes	high	high
Netflix	500/day	minutes	high	high
Facebook	1/day	minutes	high	high
Twitter	3/week	minutes	high	high
Typical enterprise	once every 9 months	months or quarters	low/medium	low/medium

PROJECT EXECUTION METHODOLOGIES – THE CHANGE

WATERFALL



AGILE



PROJECT EXECUTION METHODOLOGIES – THE CHANGE

WATERFALL



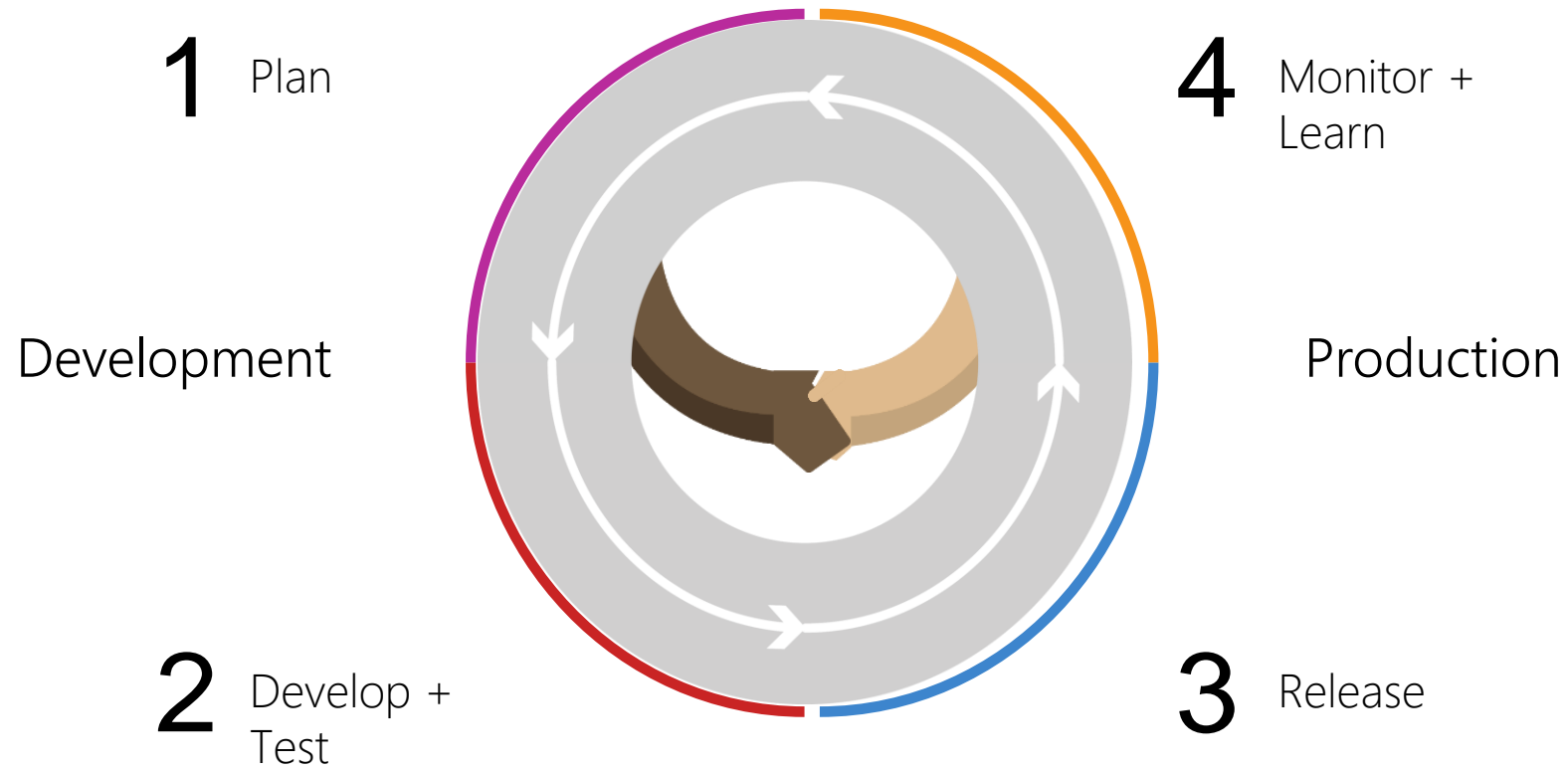
AGILE



DEVOPS

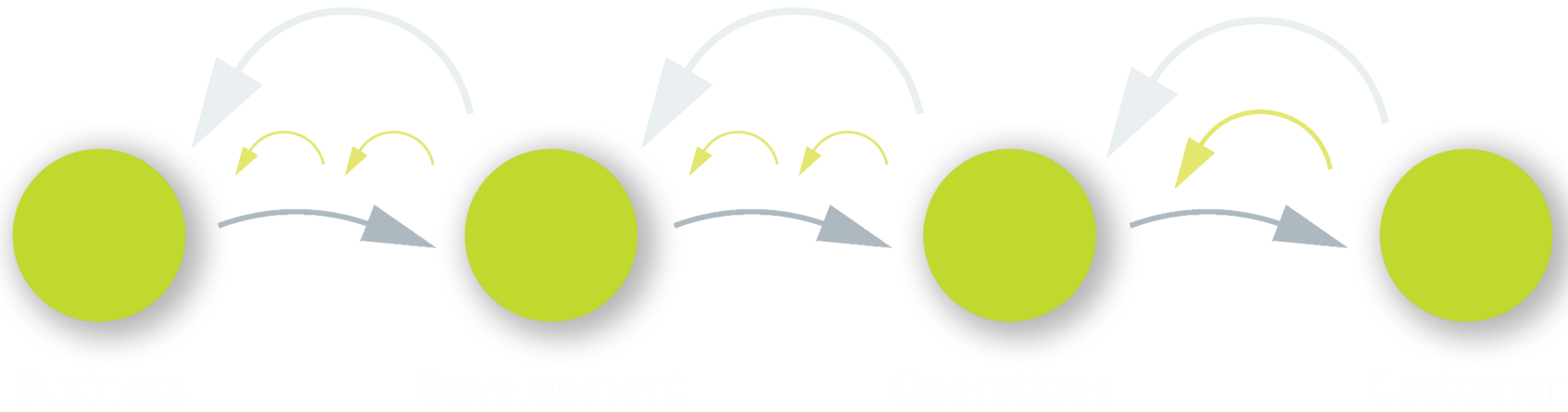


What is DevOps anyway?



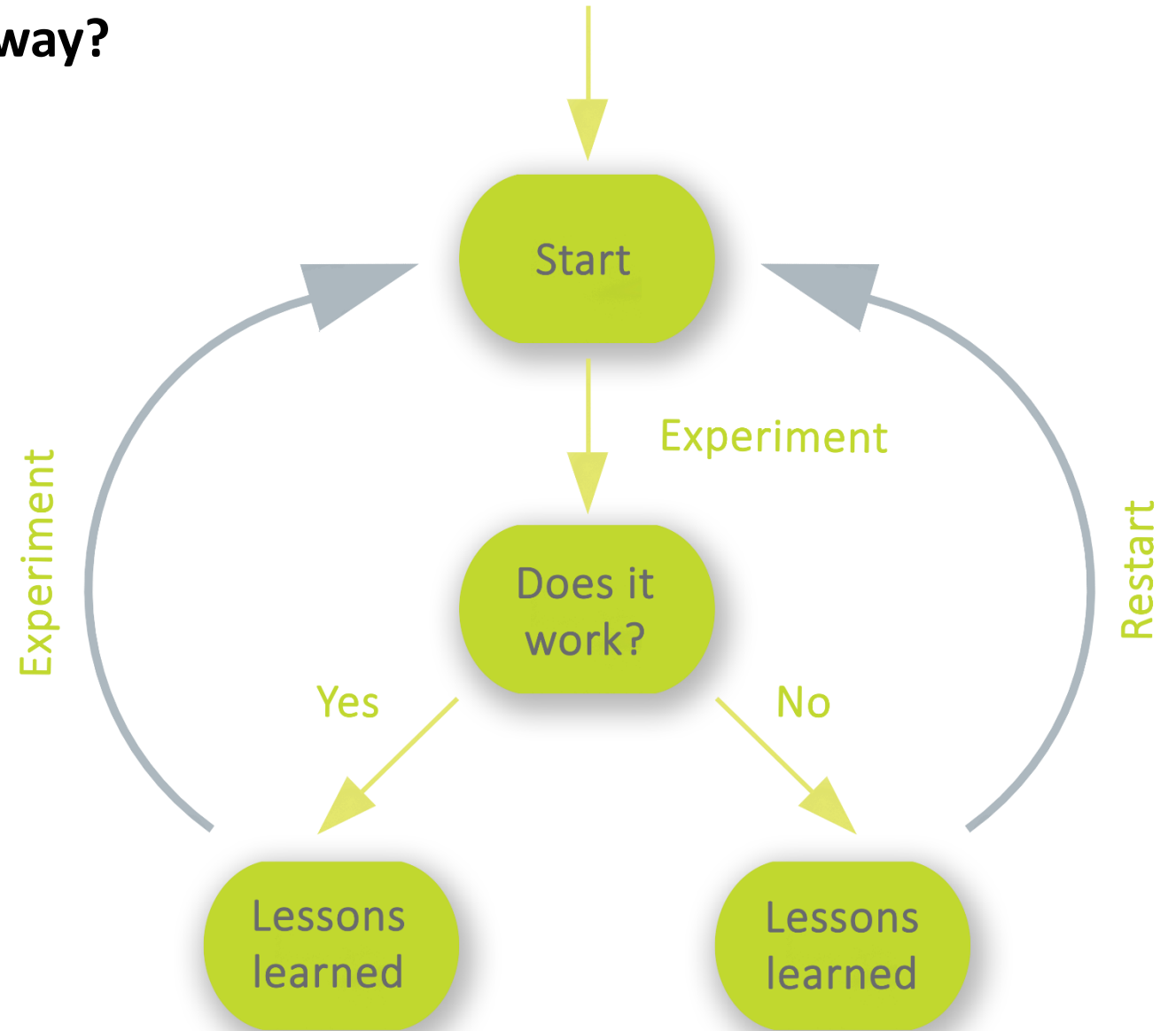
What is DevOps anyway?

Increase Feedback



What is DevOps anyway?

Experimentation and Learning



- Tools and practices

Rethinking project management practice

- ✓ Use the **same tools** as the **team**
- ✓ MVP - '**Done** is better than perfect'

- HOW TO APPLY THIS TO YOUR ORGANIZATION

- ✓ Start **small**
- ✓ Implement end to end **automation**
- ✓ Build a culture that embraces the change
- ✓ Reward **teams**, not individuals
- ✓ Create a common outcome based **dashboard**



Thank YOU!!!