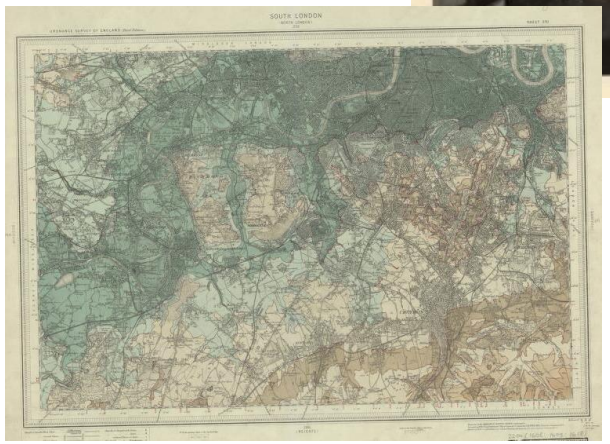
FIVE HOPS TO DEVOPS

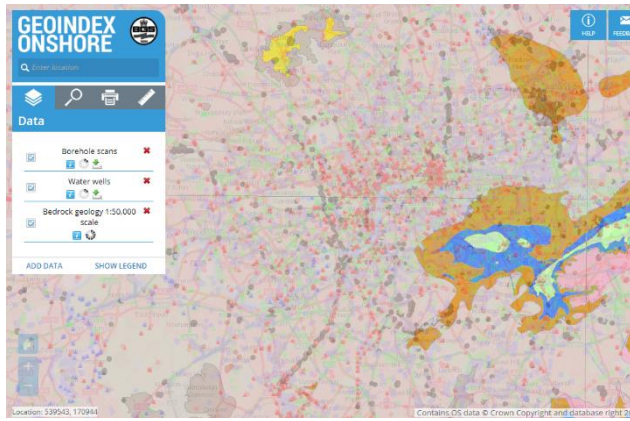
CHANGING THE CULTURE AROUND SOFTWARE DEPLOYMENT IN THE PUBLIC SECTOR

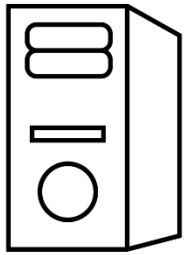
ANDREW BEAN

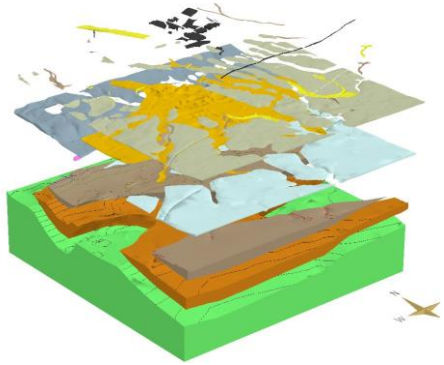
British Geological Survey
NATURAL ENVIRONMENT RESEARCH COUNCIL

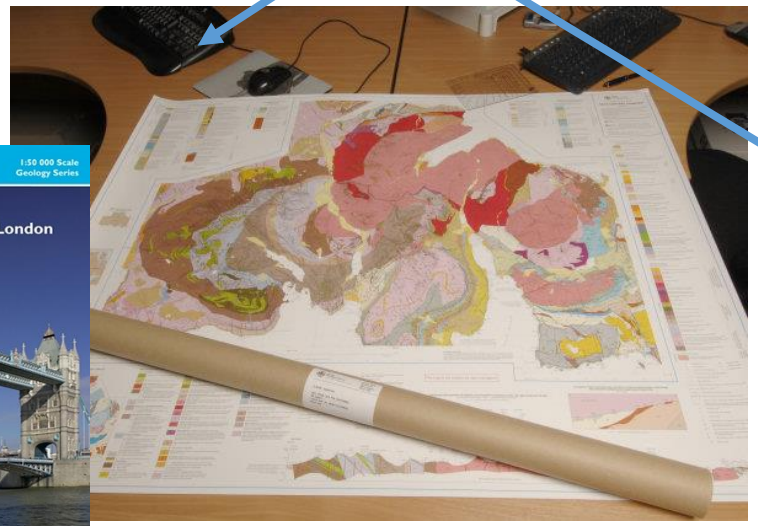
Gateway to the Earth

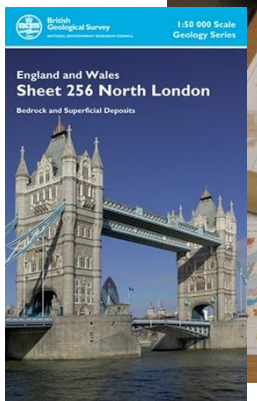


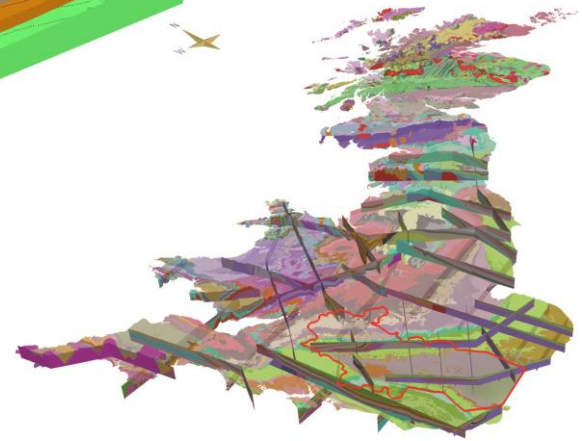






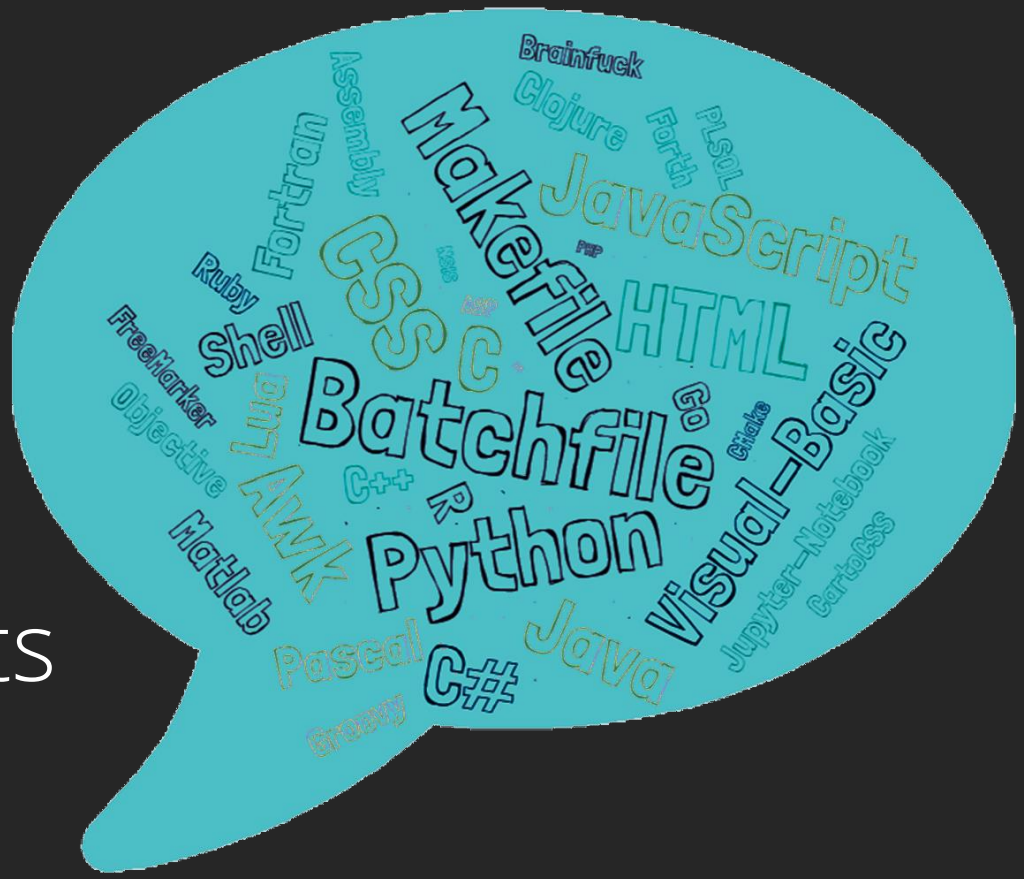






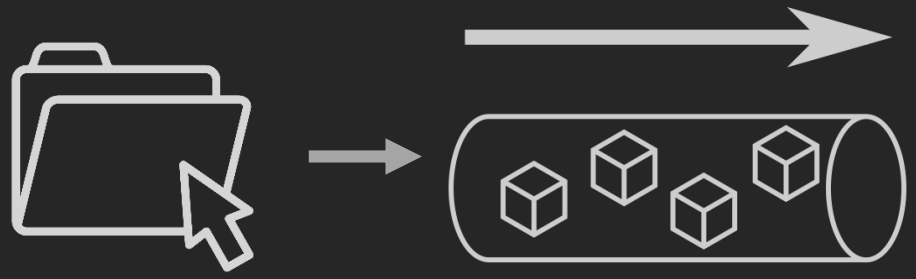
Software at BGS

- Heterogeneous
- Developers and Scientists
- Varied outputs / requirements
- Isolated, monolithic, infrequently deployed



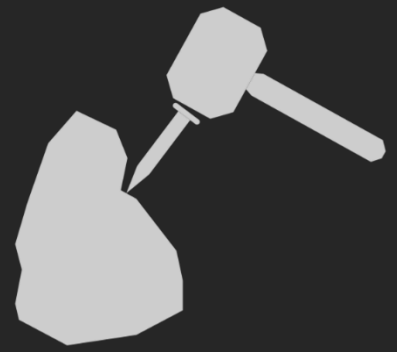
Enter DevOps?

CI / CD



Monitoring & Logging

Infrastructure as code

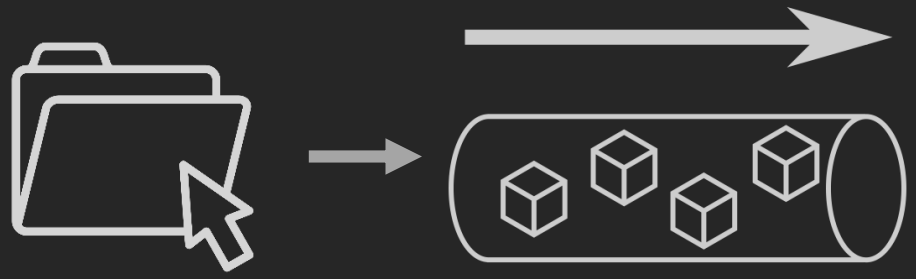


Microservices

"What is DevOps?" – Amazon Web Services (AWS)

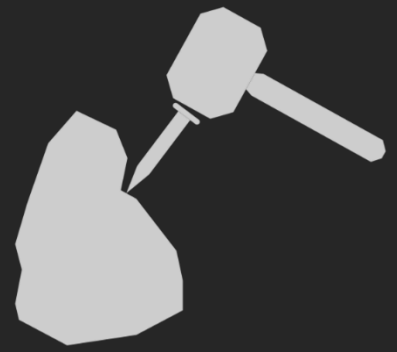
Enter DevOps?

CI / CD



Monitoring & Logging

Infrastructure as code

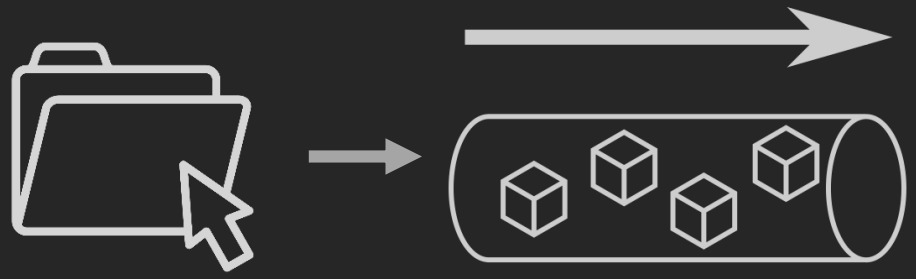


Microservices

"What is DevOps?" – Amazon Web Services (AWS)

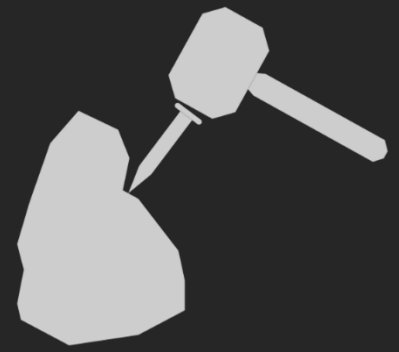
Enter DevOps?

CI / CD



Monitoring & Logging

Infrastructure as code

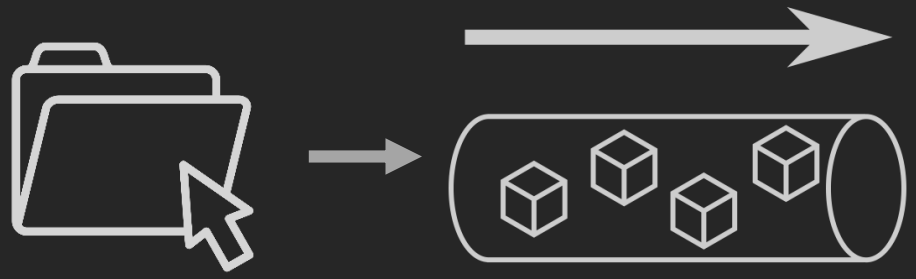


Microservices

"What is DevOps?" – Amazon Web Services (AWS)

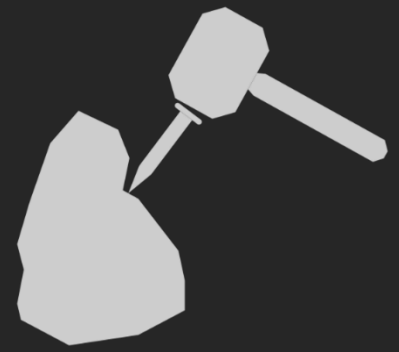
Enter DevOps?

CI / CD



Monitoring & Logging

Infrastructure as code

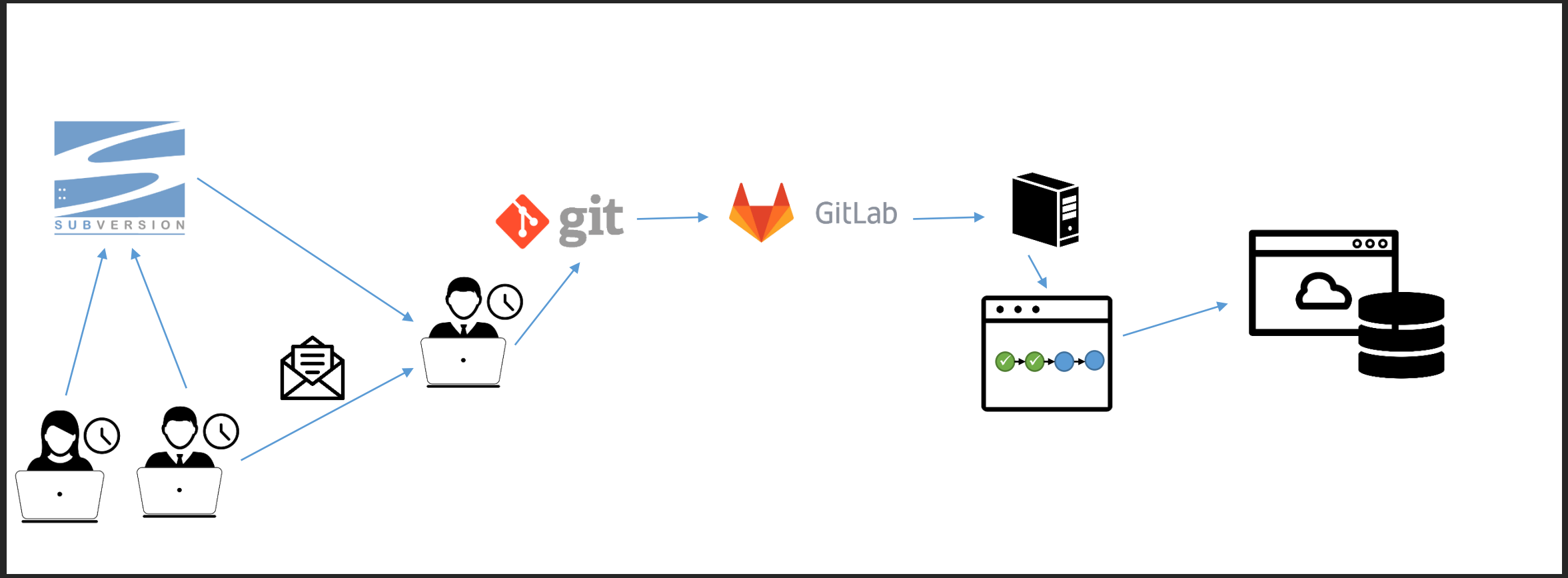


Microservices

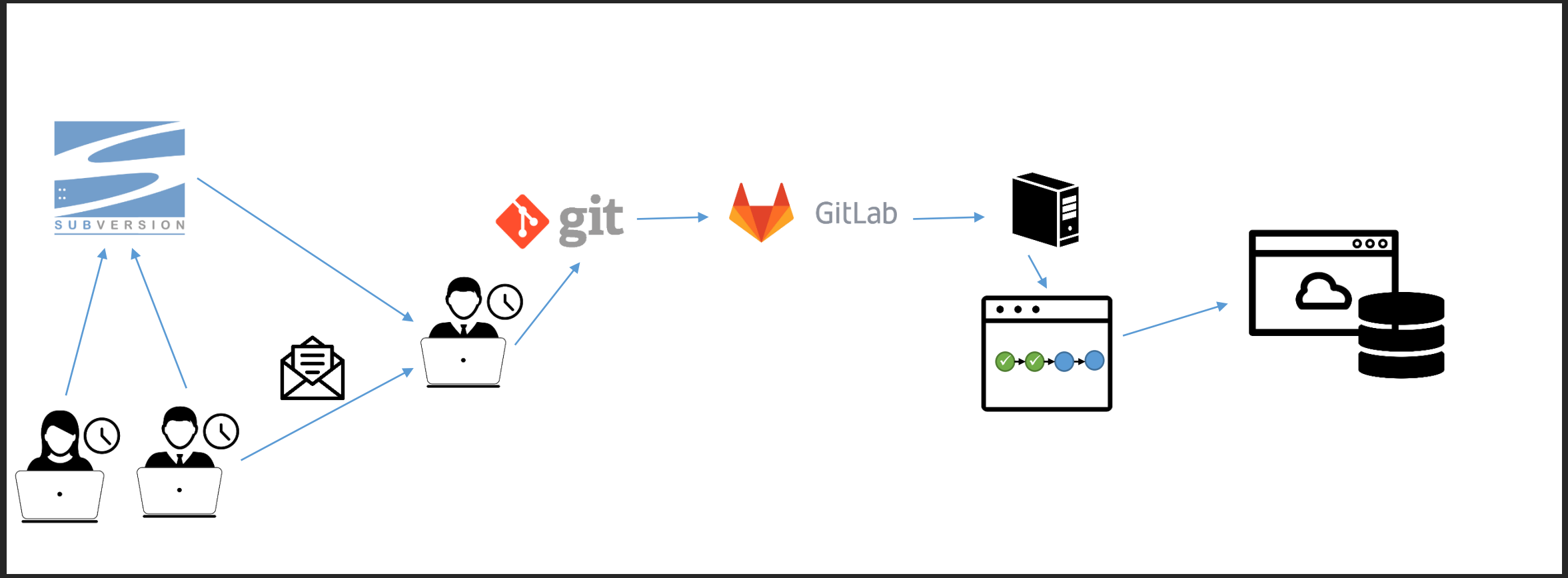
"What is DevOps?" – Amazon Web Services (AWS)

IT’S NOT ALL OR NOTHING

One step at a time...



One step at a time...



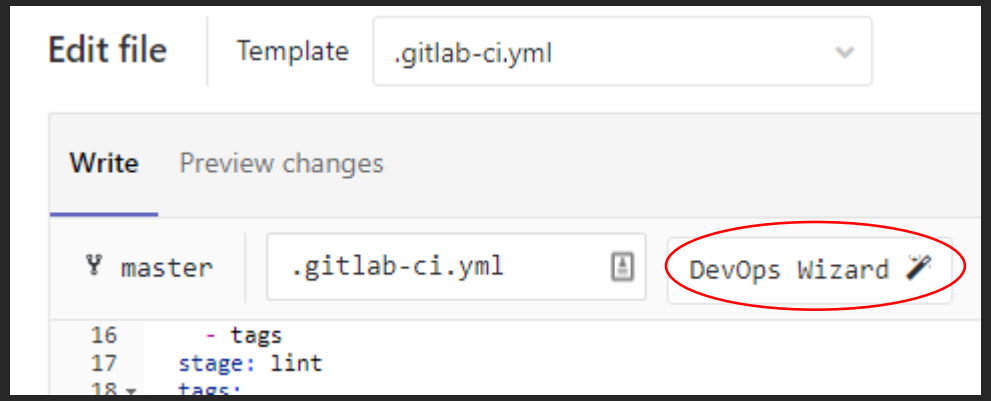
MAKE IT SIMPLE, SELL IT WELL

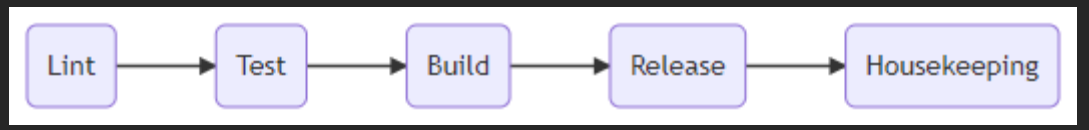
Management

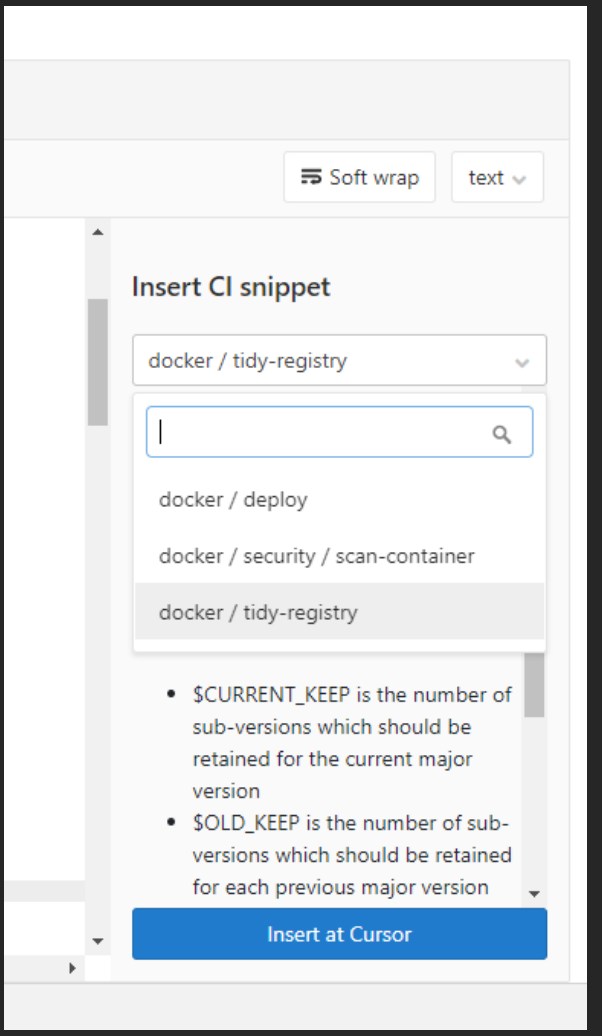
Developers

Operations

YAML – Yes, Another Mess to Learn!

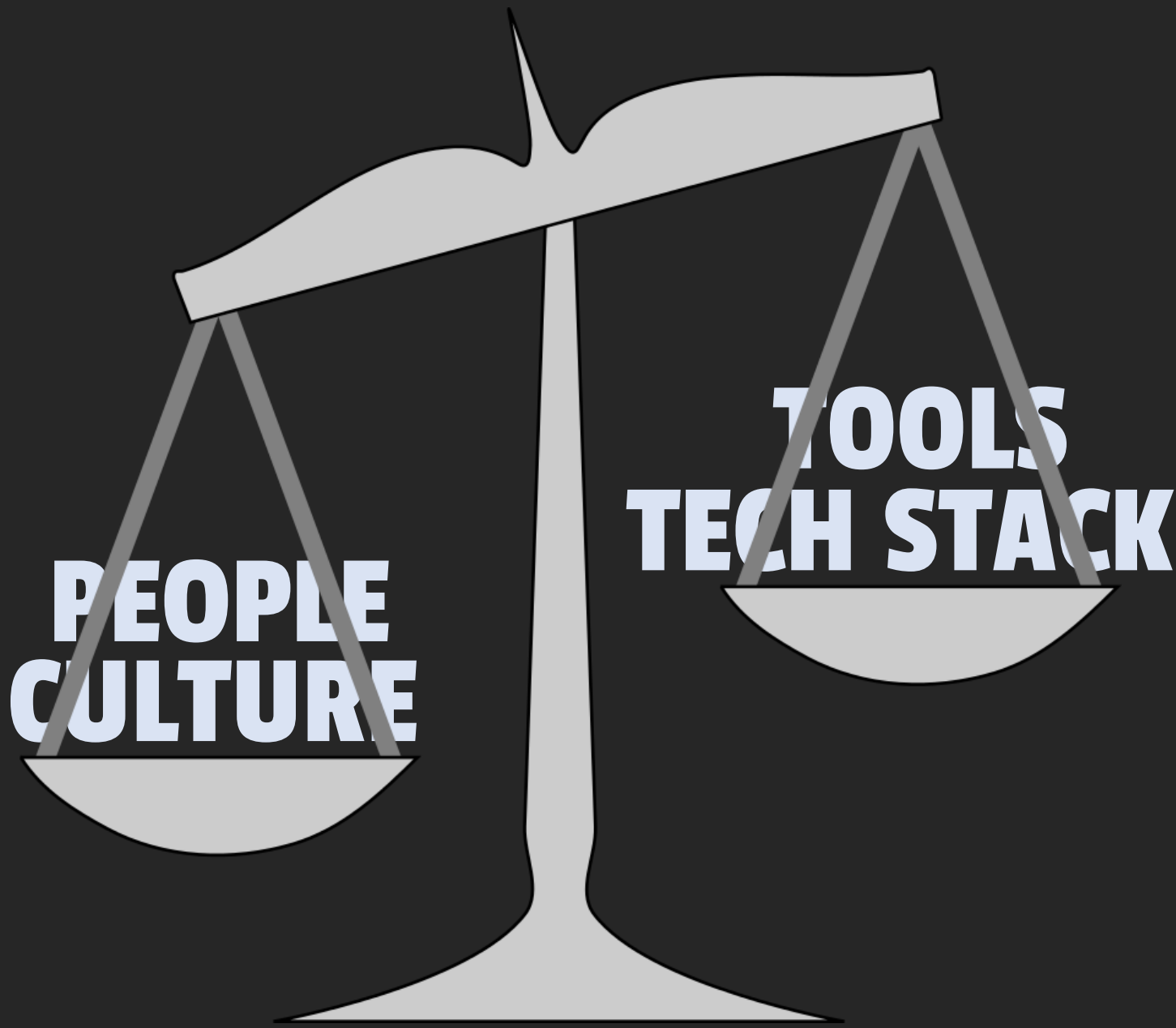






GitLab

ONE SIZE DOES NOT FIT ALL


PEOPLE
CULTURE
TOOLS
TECH STACK

‘HOP’ #4

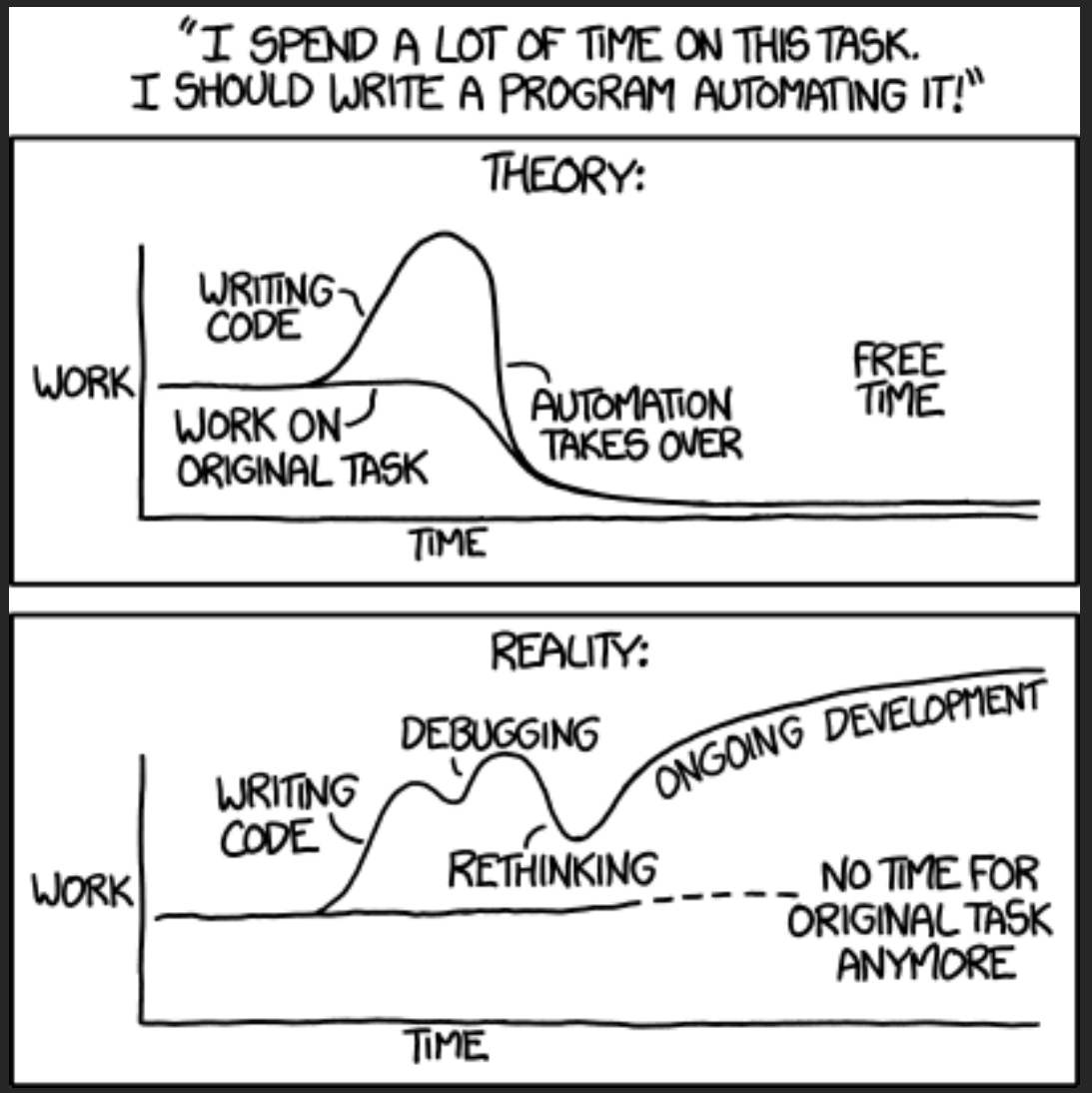
IT’S NOT ONE PERSON’S ROLE

Don’t be “the” DevOps person

Have champions

Encourage responsibility in all team members

Consider DevOps at project planning / scoping



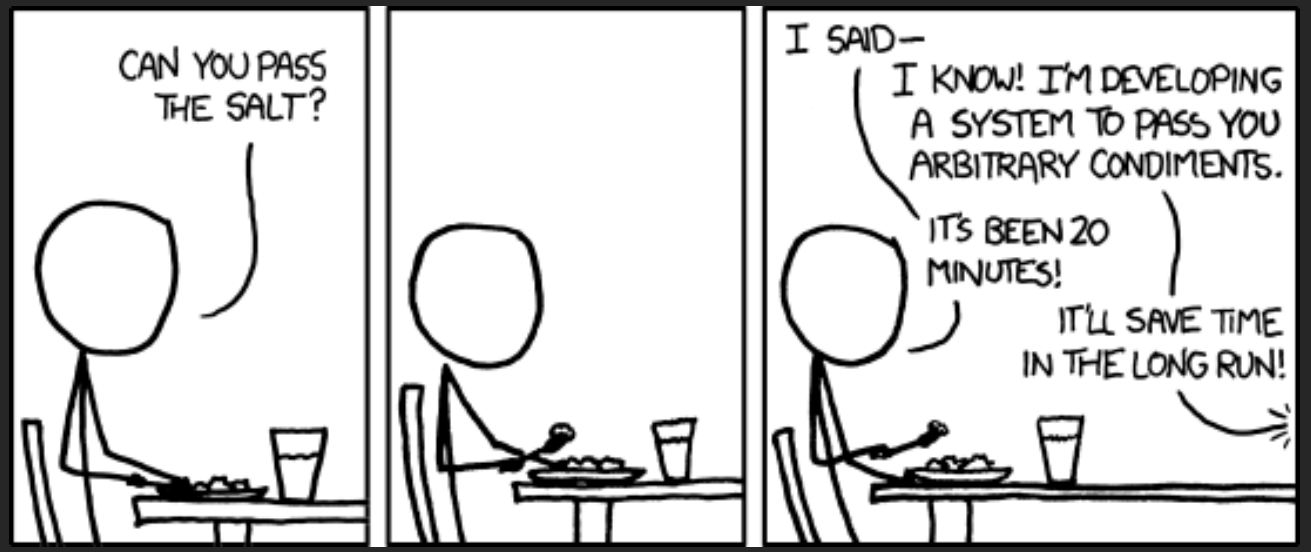
© xkcd.com

‘HOP’ #5

IT MEANS DIFFERENT THINGS TO DIFFERNET PEOPLE

(AND THAT’S OK)

Is it worth it?



© xkcd.com

Reliability

Ease of deployment

Security

Consistency

Frequency of deployment

Reduced manual workflow

Process Transparency

Stakeholder Engagement

Andrew Bean

andan@bgs.ac.uk

http://www.bgs.ac.uk

Title Slide Image: © Tobia Begemann (https://www.flickr.com/photos/tobiasbegemann/40502441271)
Icons (from https://thenounproject.com):
"Computer" ©Bakunetsu Kaito, "User" ©Wilson Joseph, "Email" ©ProSymbols, "Browser" ©lastspark, "Server" ©Yazmin Alanis, "Web Browser cloud" ©alvianwijaya, "Rock Pick" ©Artemizia Senza Nove, "Deployment Pipeline" ©Richard Slater, "coding" ©Jugalbandi
All Other Imagery: British Geological Survey © NERC