

DevOpsDays London 2023



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Struktur

- 2 dagar
- 8 föreläsningar
- 9 ignite talks
- 43 open spaces
- 2 paneldebatter

Dag 1

- Föredrag
 - Let's call platforms what they really are, ways to provide something-as-a-Service - *Abby Bangser*
 - Observability is Too Damn Expensive! - *Chris Cooney*
 - Systems Thinking For Dev Organisations - *Lian Li*
 - GreenOps in the cloud - *Sandro Cirulli*
- Ignites
 - Want to build a feedback culture? First focus on observability - *Sorrel Harriet*
 - Quantifying your reliance on Open Source software - *Jamie Tanna*
 - Delivery Metrics: the good, the bad, and the totally ridiculous - *Jennifer Mackown*
 - How To Train Great DevOps Engineers? Apply DevOps Principles! - *Jack Mead*
 - Inclusion: a positive experience - *Becky Pauley*
- Panel
 - Onwards - Evening event - *DOXLON, Adaptavist and GitLab*

Dag 2

- Föredrag

- Community hacks to enhance your career - *Sam Hepburn*
- A history of GOV.UK's infrastructure: the long voyage to Kubernetes - *Richard Towers*
- From Farm to Cloud: Using DevOps to Optimise Agriculture Operations - *Álvaro Santos Andrés*
- Psychologically Safe Reliability Management - *Lesley Cordero*

- Ignites

- How winning the AWS GameDay World Championship made us better Devops Engineers - *John Hatton, Rich House*
- Navigating Unconscious Bias in Open Source Communities - *Aakansha Priya*
- DevOps over time - *Kat Samperi*

Open Spaces 1:1

- Ideal tech stack for DevOps engineers
- Developer Experience (DevEx)
- Ask us anything: We built the NHS COVID 19 App Backend
- Is DevOps obsolete?
- What should you do when Open Source becomes unethical
- What do developers really want from the platform?
- Secrets management within AWS using GitHub Actions as CI
- DevSecOps: Tools technologies and how to start
- **Ephemeral Dev Environments**

Open Spaces 1:2

- Principals in Centralising vs Distributing Balance
- How to hire and interview DevOps engineers
- **Platform Engineering:** Best Practices, what worked, what didn't.
- Tech's role in climate action uniting for change
- Let's talk compensation
- What exactly is GitOps and how do I do it
- AI stuffs
- Maintaining and understanding hundreds of repositories
- 10 Years of DevOpsDays London

Open Spaces 2:1

- How to E2E test an app that is made of several microfrontend frameworks right from dev->stage->prod when each component changes at its own pace (yeah that one)
- Diversity & Mental Health in the Workplace
- Team Topologies are you really doing it
- Multi cloud Integration
- K8S bashing the Harry Maguire cruce / What's next for Kubernetes
- I thought Jenkins was Dead? Hudson is that you?
- **Bringing traditional infrastructure people on a DevOps journey**
- Team training when remote
- Developer Portals

Open Spaces 2:2

- DevOps for non-web software
- Deploying + Monitoring Services
- K8 optimisation on "" saving you time & cost
- Contract based testing
- Open Source prioritisation and monetisation
- Preparing for Zero Day CVEs 🧛
- **DevOps Back 2 Basics**
- Contributing back to open source - does your company back you?
- DevOps in regulated environments

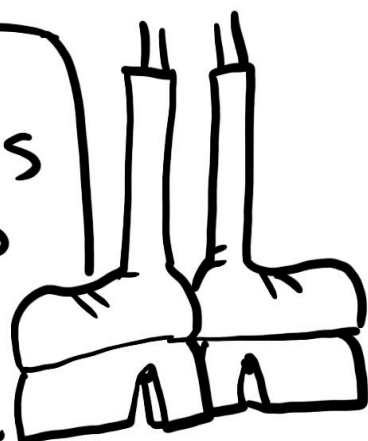
Open Spaces 2:3

- Testing CI/CD Pipelines
- Work Life Balance
- OpenTelemetry
- Herd mentality and DevOps
- When is on-call a bandaid for organizational failures
- Platform Communities
- What is the magic potion to get culture change
- Binary provenance/checking nobody has interffered with your deploy artifact
- DevOpsDays London 2023 Retro

Noteringar

LET'S CALL PLATFORMS WHAT THEY REALLY ARE, WAYS TO PROVIDE SOMETHING-AS-A-SERVICE

WHAT DO PLATFORMS HAVE TO DO WITH DEVOPS?



LET'S GET PAST THE BUZZWORDS!



AGILE BROUGHT PEOPLE TOGETHER...



...AND DEVOPS WOULD EXTEND THIS!

ABBY BAN .. BUT SILO. ARE EVERY



IMAGINE YOU'RE TRYING A NEW RECIPE... YOU MAY NEED NEW INGREDIENTS OR PANS!

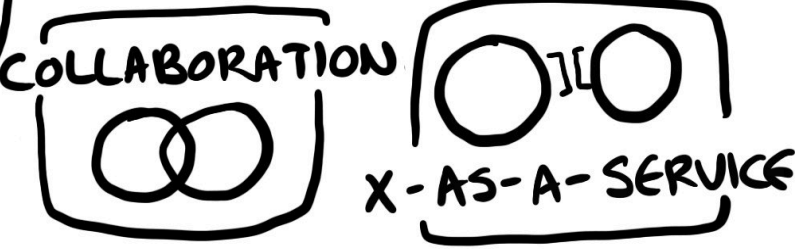


DEVOPS BUT - WE'RE GOING TO HAVE GROW OUR OWN PLANTS... ..OR FORGE OUR OWN UTENSILS!

WE DON'T ALL HAVE THE SKILLS OR INTEREST...

COMPLETE AUTONOMY LEADS TO DEBILITATING RESPONSIBILITY!

DEVOPS REDUCES FRICTION USING COLLABORATION!



PLATFORM ENGINEERING ENABLES DEVOPS AT SCALE!

PLATFORMS ARE PRODUCTS THAT PROVIDE SERVICES!

...WELL, THAT'S STUPID!

... IF YOU CAN USE ANOTHER COMPANY'S PROCESS... DO IT!

FRAMEWORKS IMPROVE PLATFORM BUILDING!

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OBSERVABILITY IS TOO DAMN EXPENSIVE!

CHRIS COO

I WORK FOR CORALOGIX
... WE GIVE OUT FREE SOCKS?

OBSERVABILITY COSTS AROUND 7-10% OF YOUR CLOUD BUDGET!

WHY?

← MICRO SERVICES!

SRE!

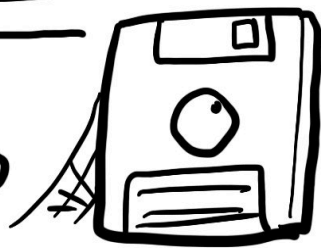
EPHEMERAL SERVICES

SO, WHAT CAN WE DO?

DEFINE USE CASES

DEVELOP USAGE STATS

SO... WE NEED LESS DATA?
No!

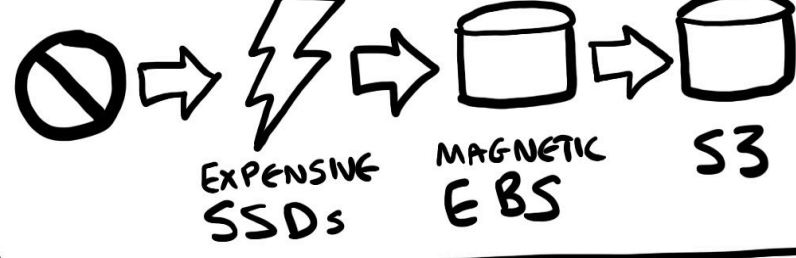


99% OF DATA IS NEVER SEARCHED!

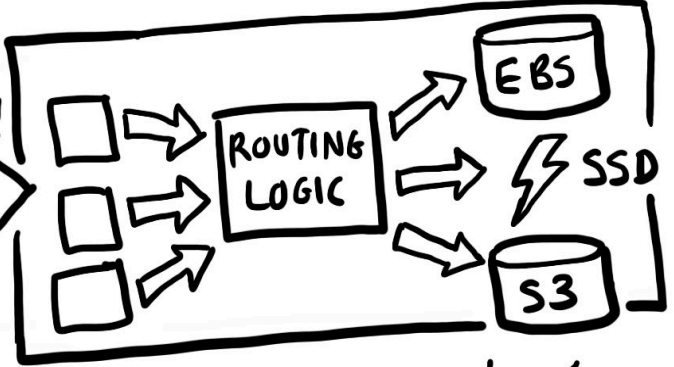
95% OF ALL ALARMS ARE FROM THE SAME 5 ERRORS!

99% OF QUERIES DON'T PASS 7 DAYS

ABANDON THIS PATTERN!



FOR THIS!



STOP RUNNING LOGS...

OR SEND TO LOW-COST STORAGE

...OR TRANSFORM THE DATA INTO A METRIC!



IT'S EXPENSIVE!

...BEWARE HIGH CARDINALITY!

WHAT TOOLS DO YOU OFFER TO OPTIMISE COST?

THE GOLDEN QUESTION!



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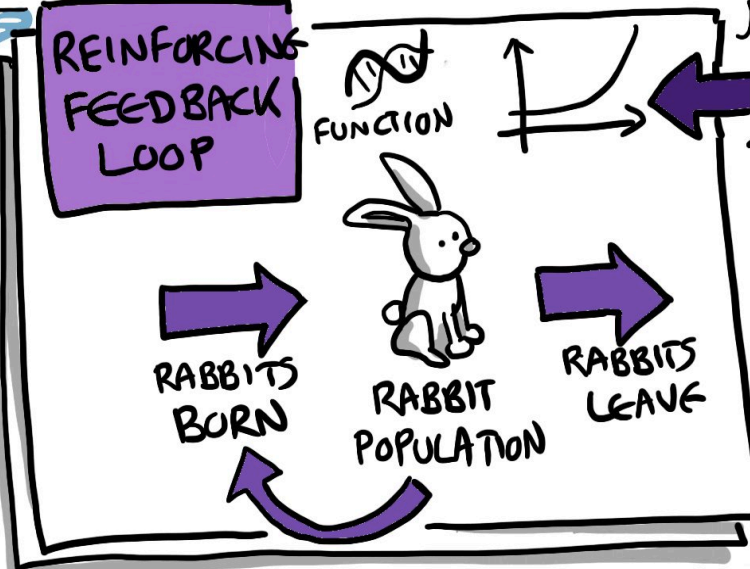
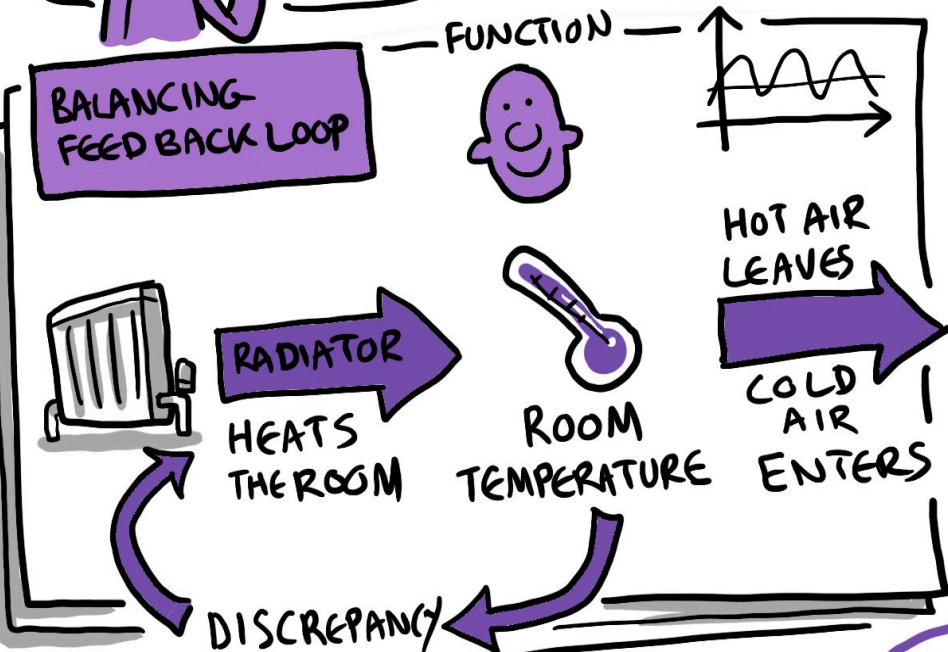
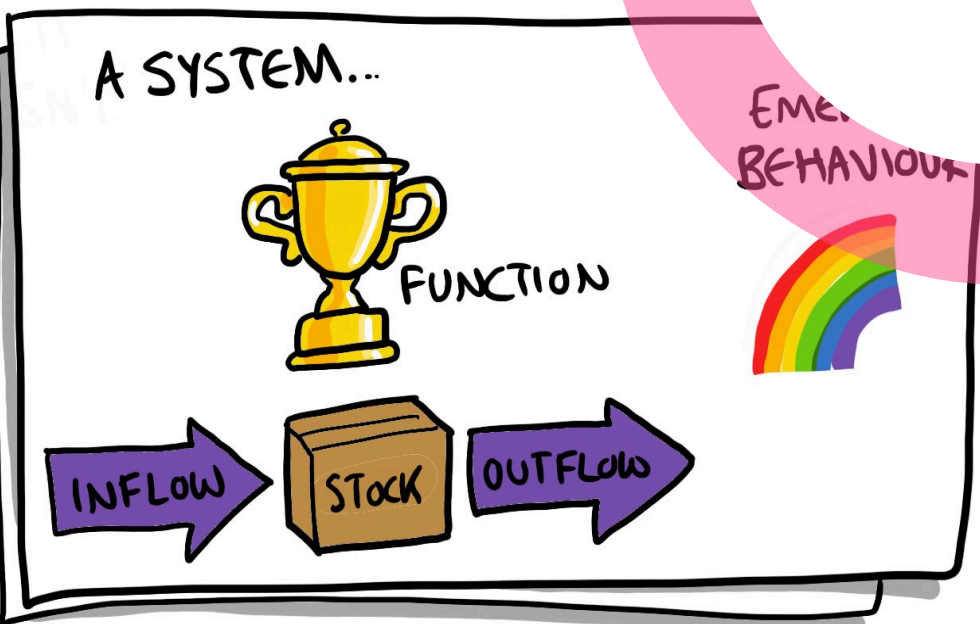
SYSTEMS THINKING FOR DEV ORGANISATIONS

LIAN LI

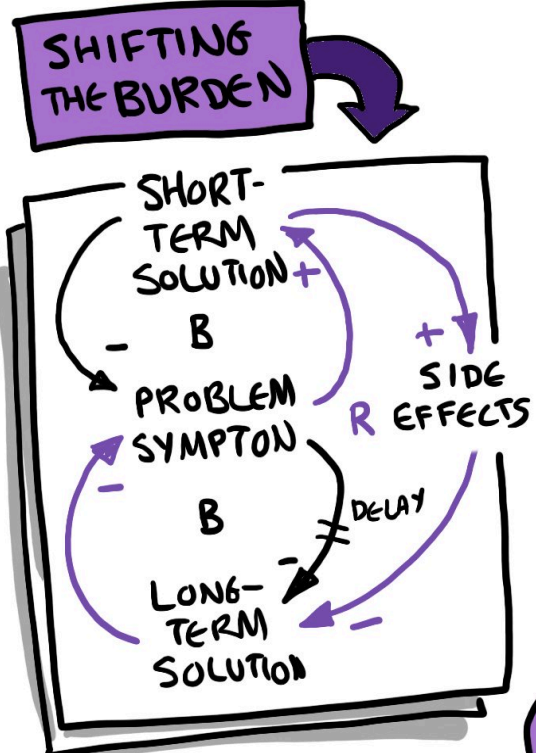
SYSTEMS ARE ALL AROUND US!
YOU ARE A SYSTEM!



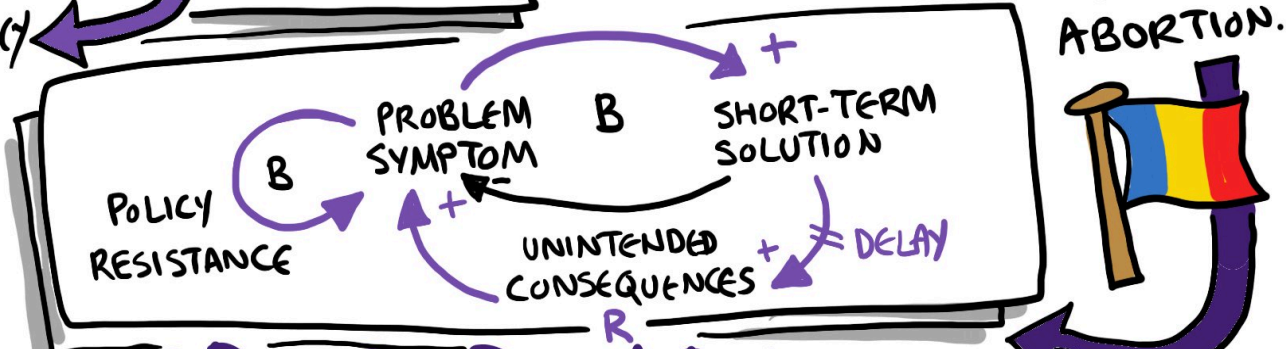
...IF YOU REPLACE IT'S PARTS, IS IT STILL THE SHIP OF THESEUS?
...BUT IF YOU USE THOSE PARTS TO BUILD SOMETHING ELSE... IT ISN'T!



FIXES THAT FAIL...
eg. COMMUNIST ROMANIA BROUGHT IN A BAN ON ABORTION...



DON'T WORK FOR THE SYSTEM!
...USE SYSTEMS THINKING!
INQUIRY BEFORE ADVOCACY!
SURFACE MENTAL MODELS!
RELATIONSHIPS VS. ELEMENTS!
BUFFERS & DELAYS!
FEEDBACK POLICIES!
VIEW OF RESPONSIBILITY!



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GreenOps

Sandro Cirulli - The Scale Factory

- exact numbers of ICT emissions are debatable - scope 1/2/3
 - but significant
- tips
 1. use regions with low emissions (along with latency and cost et al.)
 2. serverless optimizes resource utilization
 3. right-size, maximize utilisation, stop idle
 4. switch to power efficient CPU:s (ARM)
 5. use reserved and spot instances (capacity planning)
 6. store your data efficiently (*cf. Coralogix*)
 7. use CDN
 8. use managed services
 9. well architected review (WAR)
 10. use carbon footprint tools

Onwards evening event

DOXLON, Adaptavist and GitLab

- What has changed?
 - from *Tear-Down-the-Silos* to *Platforms-Engineering*
- Are vendors to blame for the confusion?
 - *Nah, it's in their nature*

COMMUNITY HACKS TO ENHANCE YOUR CAREER

SAM HEPBURN

IT'S NOT ENOUGH TO BE A GREAT DEVELOPER!

HELLO!
MY NAME IS...
GROWING YOUR BRAND CAN HELP GROW YOUR CAREER!

DISCLAIMER
YOU DON'T HAVE TO DO IT ALL!

PUBLIC SPEAKING!

WHAT DO YOU TALK ABOUT?

YOUR PROJECTS?

WHAT SHOULD HAVE BEEN EASY?

YOUR UNIQUE SOLUTION?

WHAT CAN'T YOU SOLVE?

...YES YOU ARE!

BU I'M NOT AN EXPERT!

CALL FOR PAPERS!

HUMOUR! →

NUMBERS! →

CATCHY! ←

SHORT! ←

NOT TOO FANCY!

AVOID!

- SEXUAL REFERENCES!
- OFFENSIVE LANGUAGE!

NO NINJAS OR PIRATES!

ABSTRACT:

- SHORT & TO THE POINT!
- CLEAR TAKE-AWAY!
- SELL YOUR IDEA!
- BULLET POINTS ARE YOUR FRIENDS!
- NOT AN ESSAY!



COMMUNITY ENGAGEMENT!

SHARED...
..CONTENT & CONVERSATIONS!

..THERE'S ALWAYS SOMEONE HIGHER ON THE MOUNTAIN!

RUN THESE BY YOUR COLLEAGUES!

NO PRODUCT PITCHES!

OPEN SOURCE!

CAN BE A WAY TO LEARN!

IMPROVE SOFTWARE!

FIND A PROJECT THAT YOU ALREADY USE!

THE COMMUNITY CAN HELP YOU IN YOUR JOB SEARCH!

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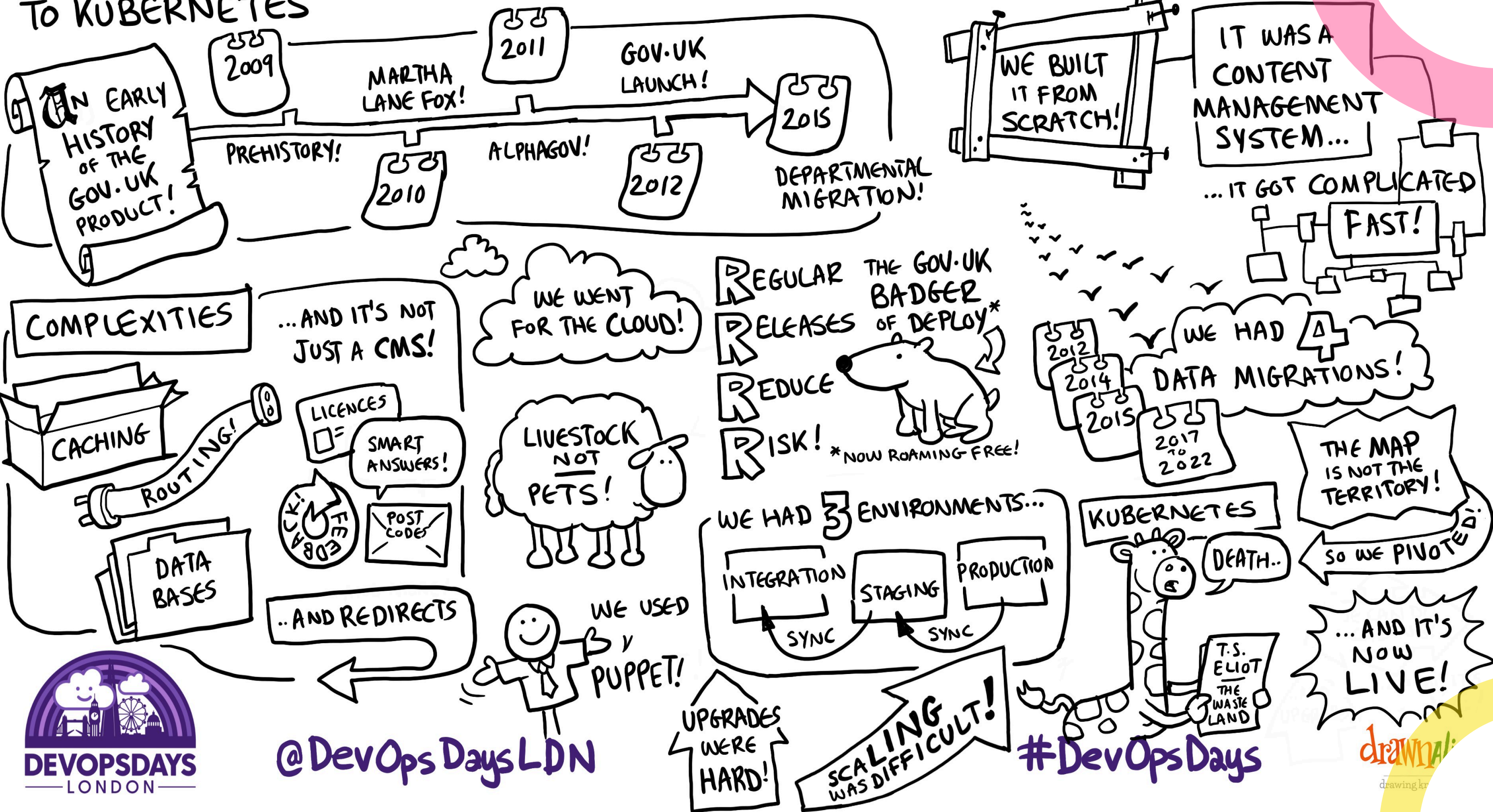
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0 YOU DON'T HAVE TO
0 CONTRIBUTE CODE!
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A HISTORY OF GOV.UK'S INFRASTRUCTURE: THE LONG VOYAGE TO KUBERNETES

RICHARD



@DevOps Days LDN

drawn by drawingkr

FROM FARM TO CLOUD: USING DEVOPS TO OPTIMISE AGRICULTURE OPERATIONS

ÁLVARO SANTOS

ONE GLOBAL CHALLENGE IS TO FEED A GROWING POPULATION!



2 BILLION PEOPLE!

50% MORE FOOD NEEDED!

THE NEED FOR CLOUD TECH IN AGRICULTURE!

FARMERS DON'T GIVE A CROP ABOUT I.T.!



DATA-DRIVEN SERVICES FOR AGRICULTURE!

- INCREASE FOOD PRODUCTION!
- RECOMMENDATIONS ON PLANTING & PESTICIDE USE!
- REAL-TIME REMOTE MONITORING!
- IDENTIFICATION OF CROPS AT RISK OF DISEASE!

- THE CLOUD LETS US...
- ..STORE UNLIMITED DATA...
- ..USE THE LATEST A.I..

WHY IS DEVOPS CRUCIAL FOR THE CLOUD?

TOOLS ARG DEPLOYED QUICKLY & RELIABLY!

DEVELOPERS LACK SKILLS & SERVICES!

SECURITY!

OUTSOURCING!

HOW TO DEVOPS: THE BAD WAY!

RESISTANCE TO CHANGE!

MEASUREMENT & FEEDBACK!

NO EXPERIENCE WITH AUTOMATION

STRUCTURE!

AUTONOMY!

HOW TO DEVOPS: SPOTIFY MODEL

CROSS-FUNCTIONAL TEAMS!

AGILE!

..& AUTOMATION IS NO LONGER A CHALLENGE!

2. FINOPS MINDSET!

UNDERSTAND YOUR CLOUD SPEND!

3. AUTOMATION FIRST!

LESSONS LEARNED...

4. BE DEVELOPER-CENTRIC!

5. OBSERVABILITY MATTERS!

STANDARDS! LIBRARIES! TECHNOLOGY!

1. BE OPEN!

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Psychologically Safe Reliability Management

Lesley Cordero - The New York Times SRE

- Teams perform better when feeling psychologically safe
 - Trauma-Informed Reliability Management
- Chronic problems are the most common threat
 - Remote working is finally accepted
 - Biases are chronic issues
- Intervention
 - Preventative
 - Proactive
 - Reactive
 - blameless post mortems are not applicable for leadership
 - follow up with action - leadership is earned
- With privilege comes responsibility

My Open Spaces

- Ephemeral Dev Environments
- Platform Engineering: Best Practices, what worked, what didn't.
- Bringing traditional infrastructure people on a DevOps journey
- DevOps Back 2 Basics

Over and out

