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# When DevOps meets Service Delivery

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Cristan Massey & Apostolis (Toli) Apostolidis

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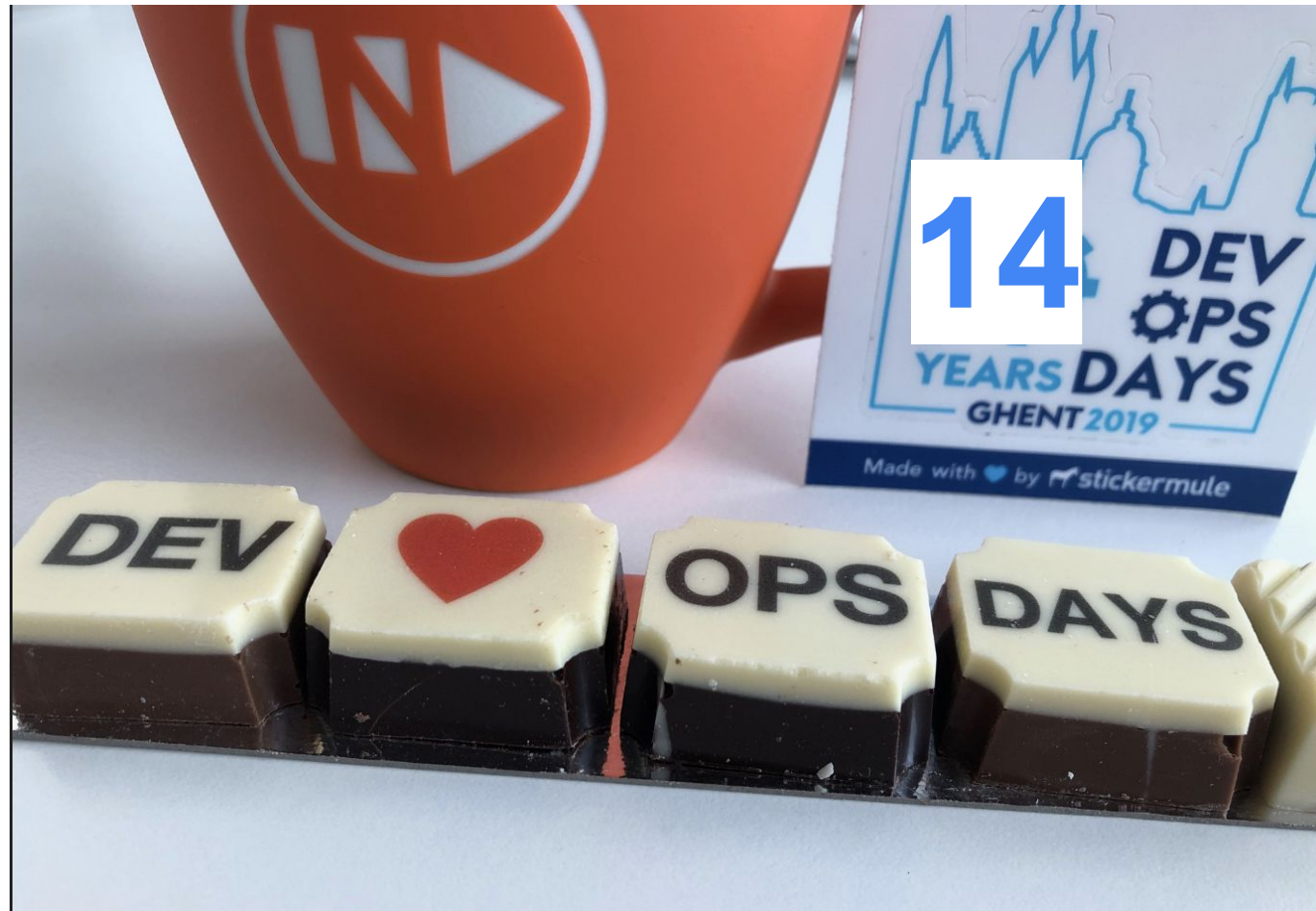
# When DevOps meets ~~Service Delivery~~ ITSM

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Cristan Massey & Apostolis (Toli) Apostolidis

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2009



# 1989



IT Infrastructure Library

## Central Computer and Telecommunications Agency

[ccta.gov.uk](http://ccta.gov.uk)



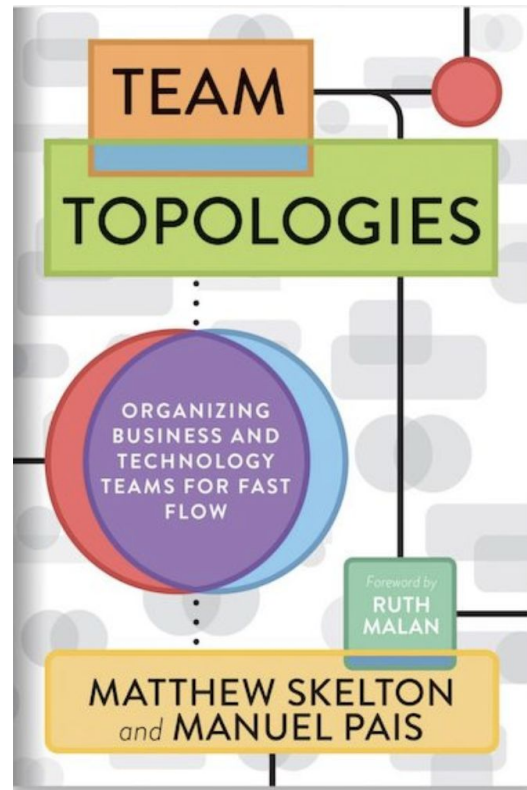
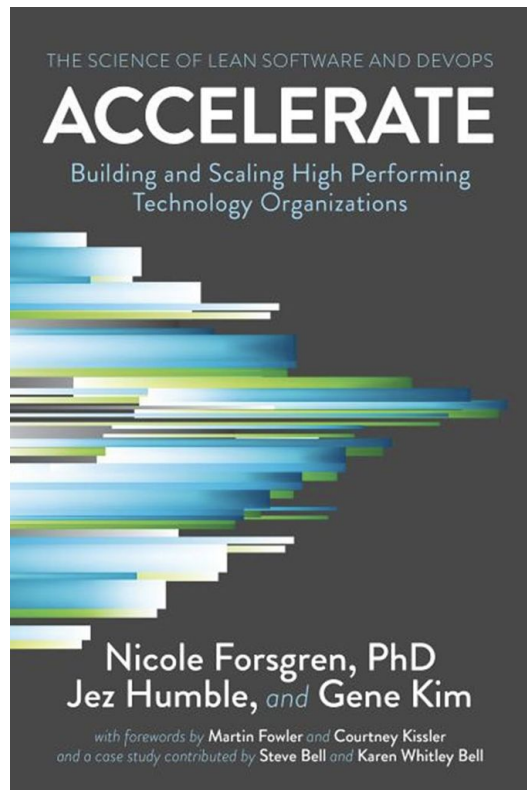
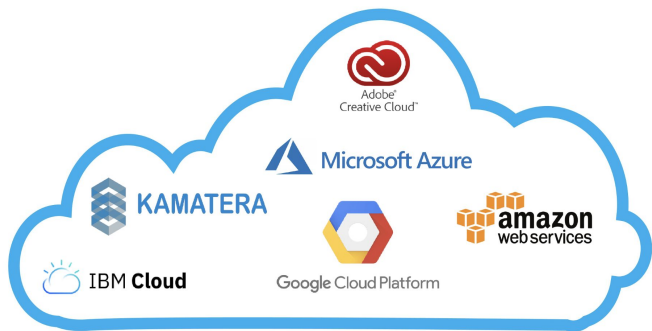
The Central Computer and Telecommunications Agency was a UK government agency providing computer and telecoms support to government departments. [Wikipedia](#)

**Abbreviation:** CCTA

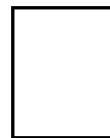
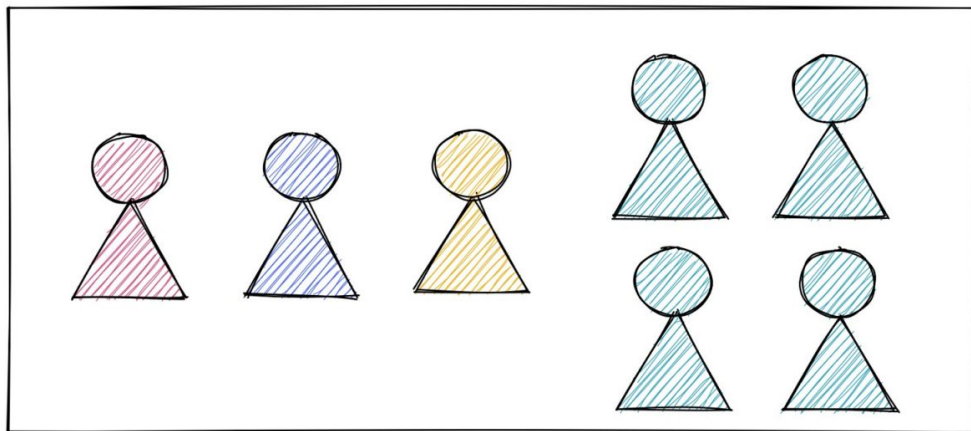
**Dissolved:** 2000 (subsumed into the OGC)

**Legal status:** Defunct executive government agency

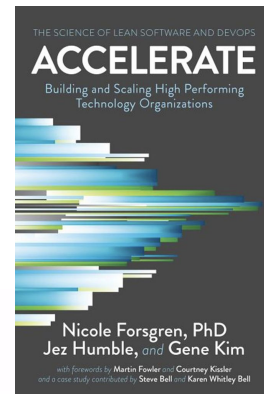
# 2023



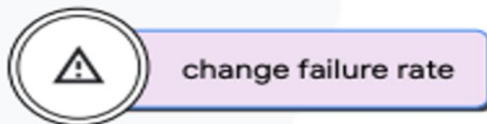
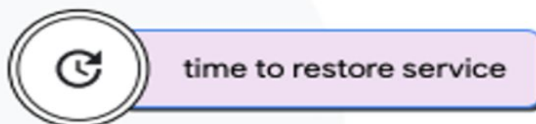
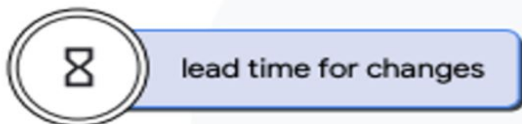
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# 2023



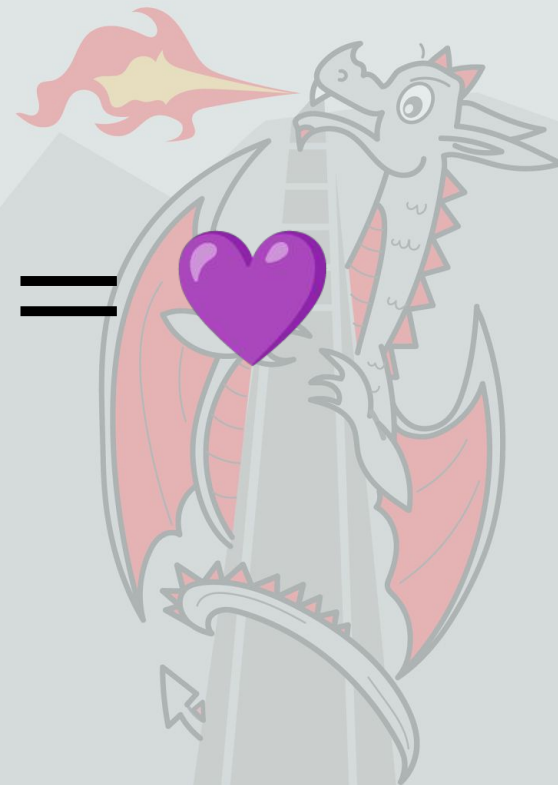
## SOFTWARE DELIVERY PERFORMANCE



## OPERATIONAL PERFORMANCE



DevOps + ITSM =





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**Cristan Massey**



**Toli**

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**ITSM** person



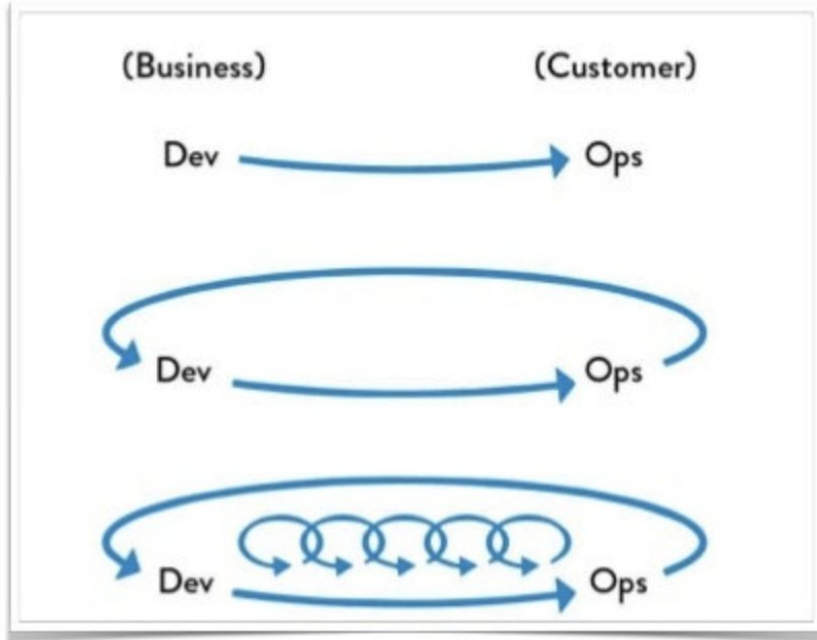
**DevOps** person

**#WTFisSRE**

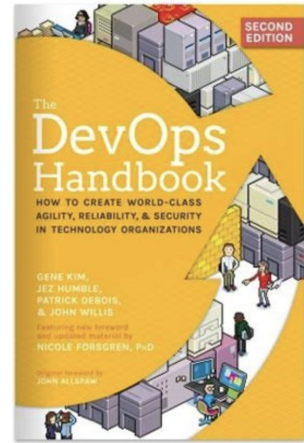


# DevOps

## The Three Ways



- 1 Flow
- 2 Feedback
- 3 Learning



# **IT Service Management (ITSM)**

**Deliver, manage & improve  
IT Services for customers**

# 1989



IT Infrastructure Library

## Central Computer and Telecommunications Agency

[ccta.gov.uk](http://ccta.gov.uk)



The Central Computer and Telecommunications Agency was a UK government agency providing computer and telecoms support to government departments. [Wikipedia](#)

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# ITIL® 4 Practices

## General management practices

Architecture management	Continual improvement	Information security management
Knowledge management	Measurement and reporting	Organizational change management
Portfolio management	Project management	Relationship management
Risk management	Service financial management	Strategy management
Supplier management	Workforce and talent management	

## Service management practices

Availability management	Business analysis	Capacity and performance management	Change enablement
Incident management	IT asset management	Monitoring and event management	Problem management
Release management	Service catalogue management	Service configuration management	Service continuity management
Service design	Service desk	Service level management	Service request management
		Service validation and testing	

## Technical management practices

Deployment management	Infrastructure and platform management	Software development and mgmt.
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ITIL® is a registered trademark of AXELOS Limited.

**ITSM**

**vs**

**DevOps**

# ITSM

## vs

# DevOps

- ✓ Manage service lifecycle
- ✓ Align services to business objectives
- ✓ Ensure services meet the needs of the org



# ITSM

## vs

# DevOps

✓ Manage service lifecycle

✓ Align services to business objectives

✓ Ensure services meet the needs of the org

✓ Shorten dev cycles

✓ Increase deployment frequency

✓ Create more dependable releases via collaboration

# ITSM + DevOps

✓ Provide a **structured approach** to service management

✓ Embrace **agility** of software development process



ITSM people can “play  
DevOps” too

We've seen it happen.

# We didn't like it, at first.





# ITSM



the flow, feedback and  
learning **police**



20+ teams practicing DevOps

# 20+ teams practicing DevOps

(+ **secretly practicing** Service Delivery,  
the DevOps way)



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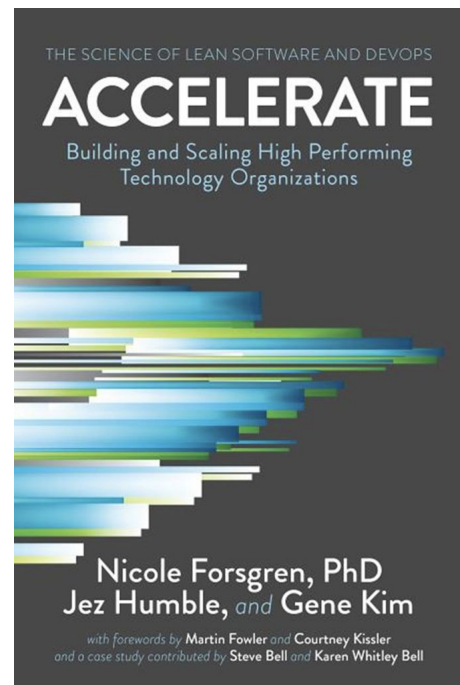
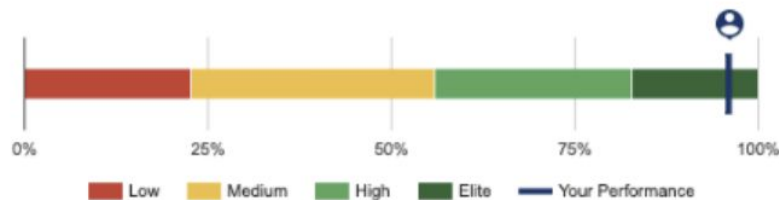
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# Your software delivery performance

Your performance:

## Elite

You're performing better than 96% of [State of DevOps Survey](#) respondents. 🤖



# A day in the life of a team



deploy (to prod) **themselves** daily



have advanced **o11y** maturity



adopt **SRE** practices

## On the same day



Major Incidents



Support cases



Big releases



Suppliers

On the same day



Major



Supp



Big re



Suppl



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# Supporting software is **hard**.



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# Service Delivery practices to the **rescue** 💪



① Optimise for **team cognitive load**

② Excellent **Service Delivery**





1 Optimise for **team cognitive load**

2 Excellent **Service Delivery**



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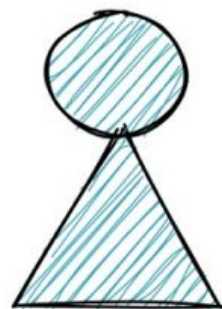
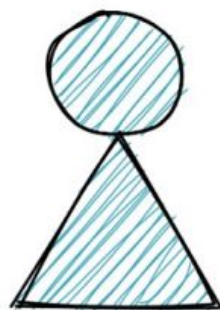
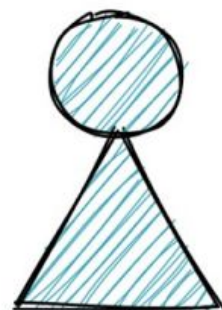
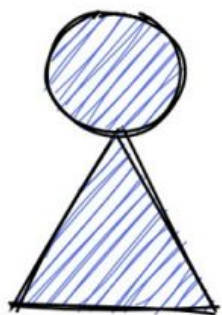
# You want to optimise for **team cognitive load**



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# The teams are the **protagonists**





**Product**



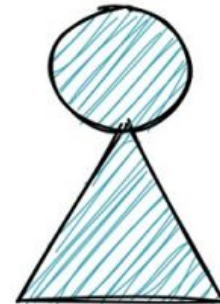
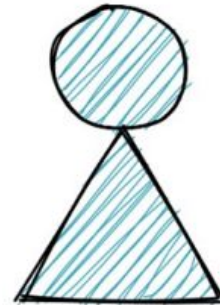
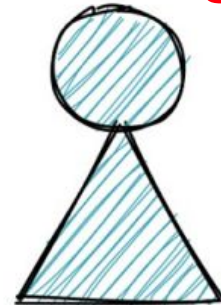
**Tech**



**UX**



**Engineers**

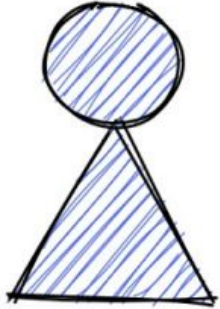


Flow of change

**Product**



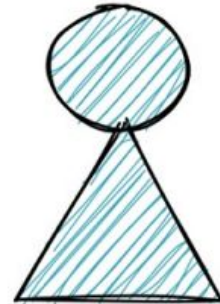
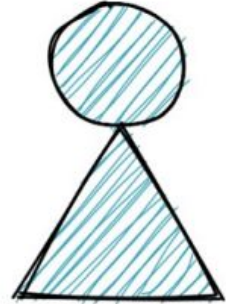
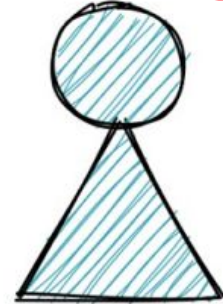
**Tech**



**UX**



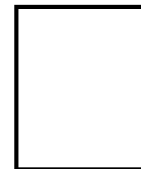
**Engineers**



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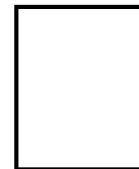
# Build



# Ship



# Support





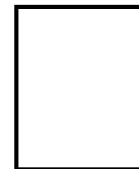
# Build



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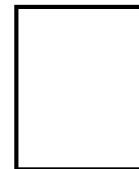
# Build



# Ship



# Support



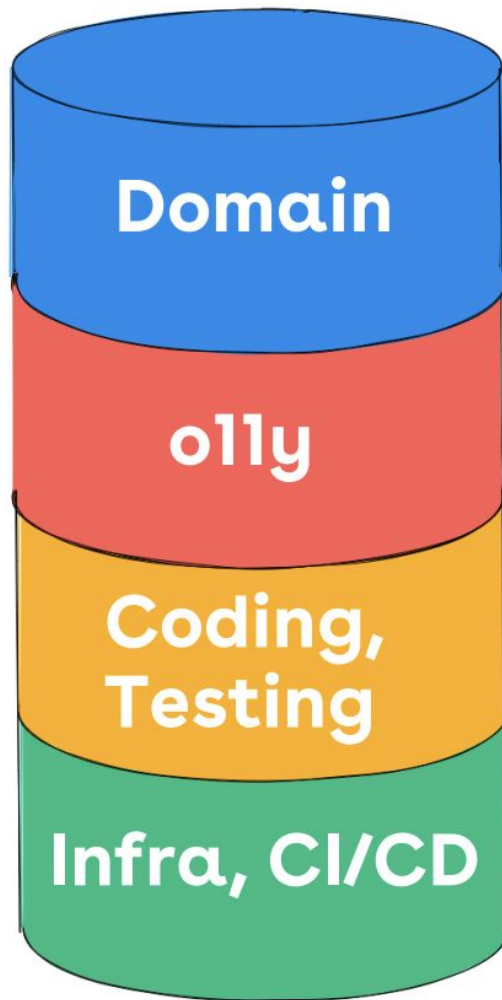
# Cognitive Load

“The amount of mental effort being used in the working memory”

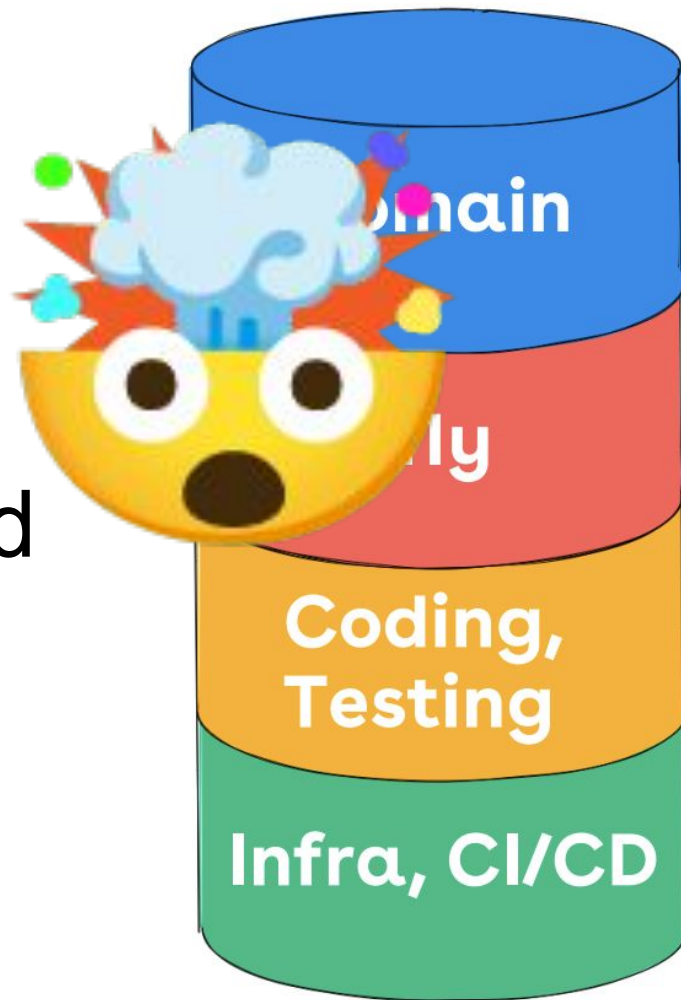
*John Sweller, Psychologist*

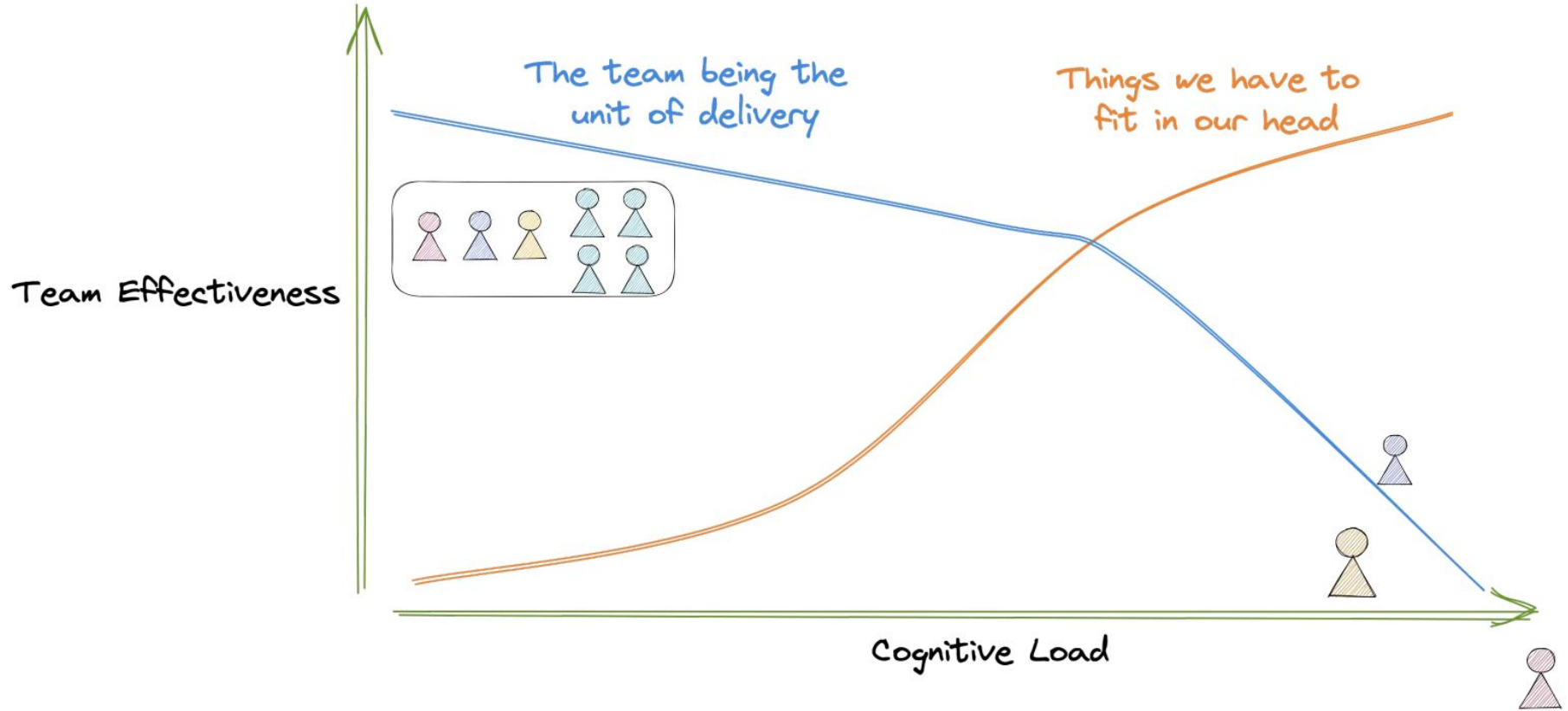


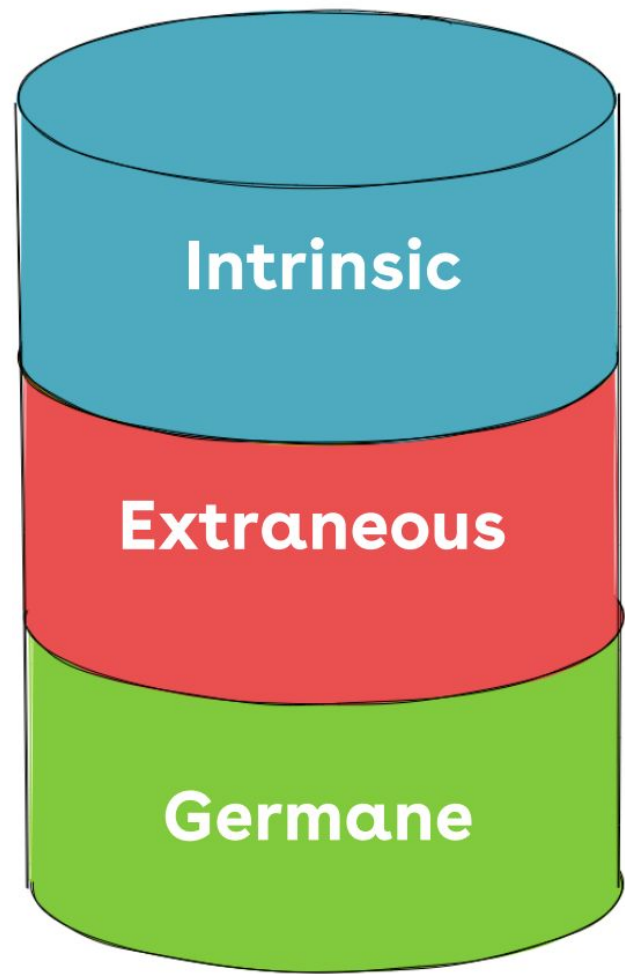
# Team cognitive load



# Team cognitive load



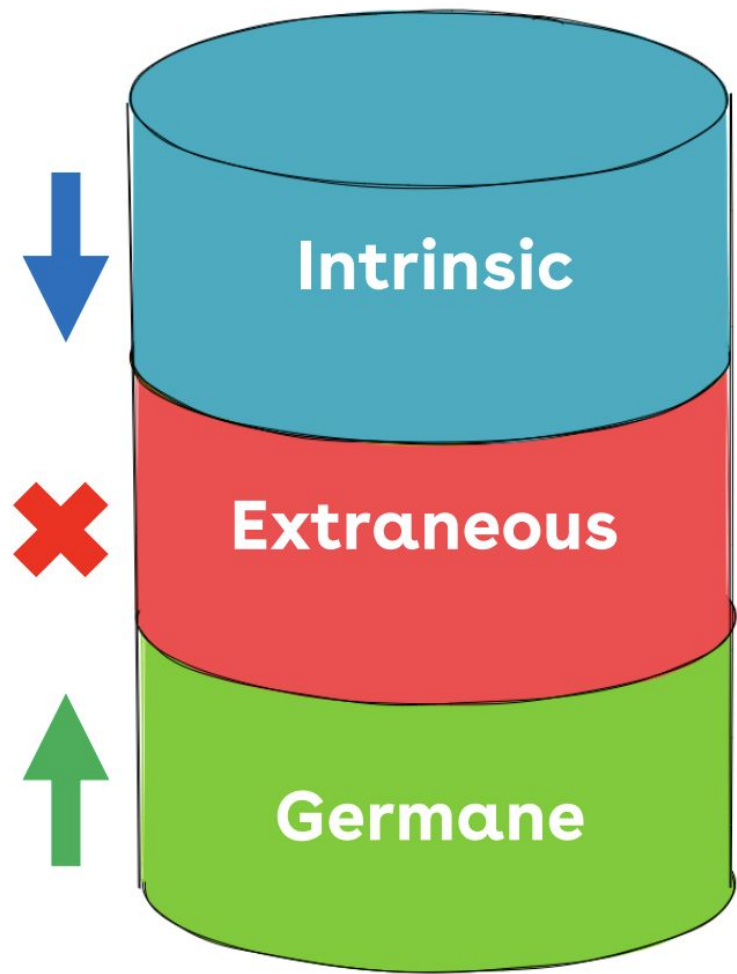




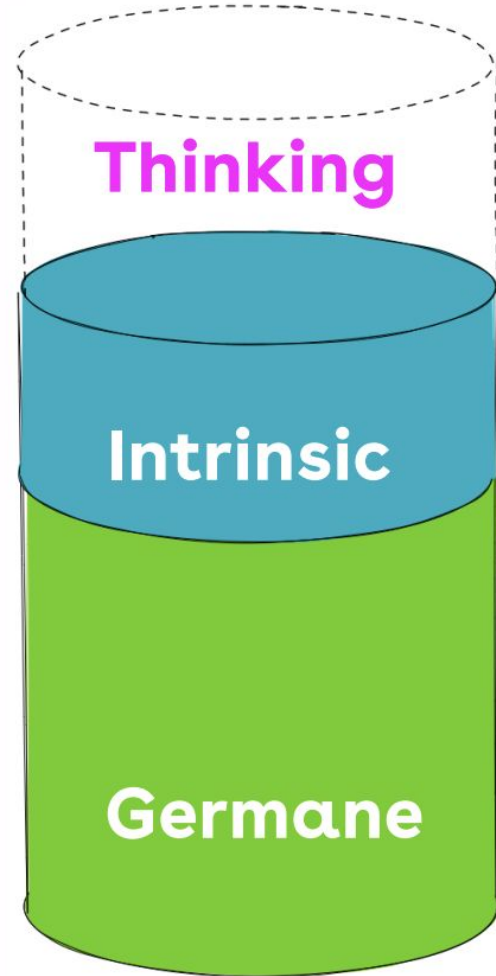
What are my  
software's failure  
modes?

How do I send  
incident comms  
again?

How do I make  
paying for a car  
easier?







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# Teams need **supporting roles**

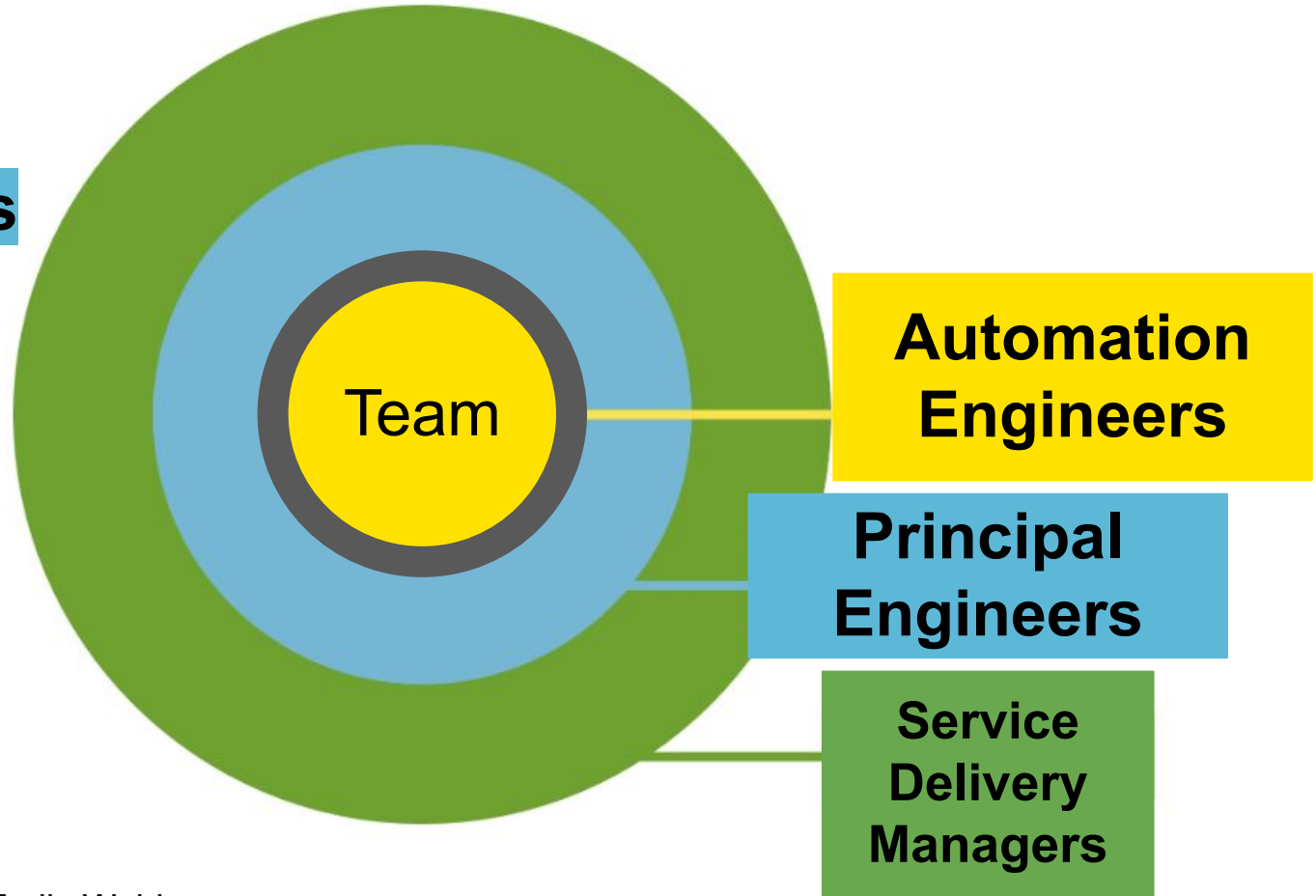


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**Core**

**Collaborators**

**Supporters**



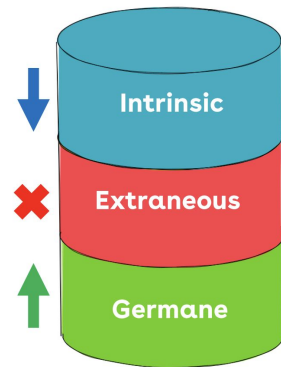
# Intrinsic cognitive load

you want to get better  
at this over time



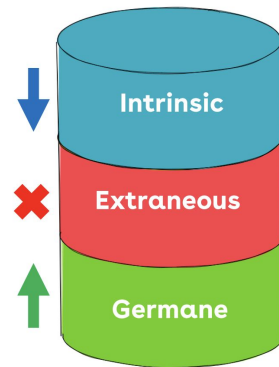
# Intrinsic cognitive load

What are the service's failure modes?

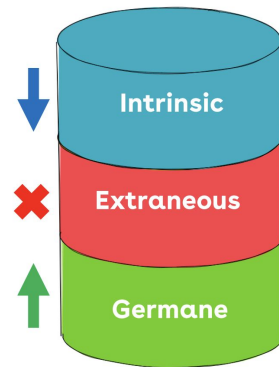


# Intrinsic cognitive load

## How to reliably release a new service?



# Intrinsic cognitive load



## How to handle incidents effectively?



# Extraneous cognitive load

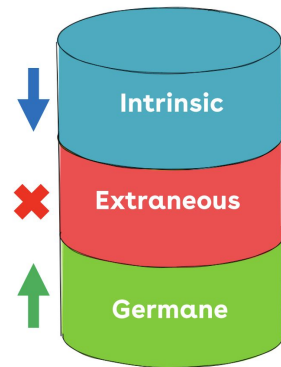
## you want to eliminate this





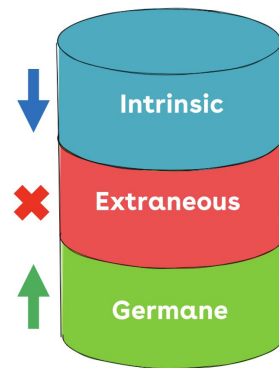
# Extraneous cognitive load

## How to communicate major incidents?

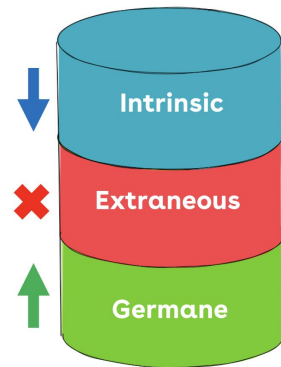


# Extraneous cognitive load

## How to triage support cases?



# Extraneous cognitive load



## How to create reports and metrics?



Time for the **experts**

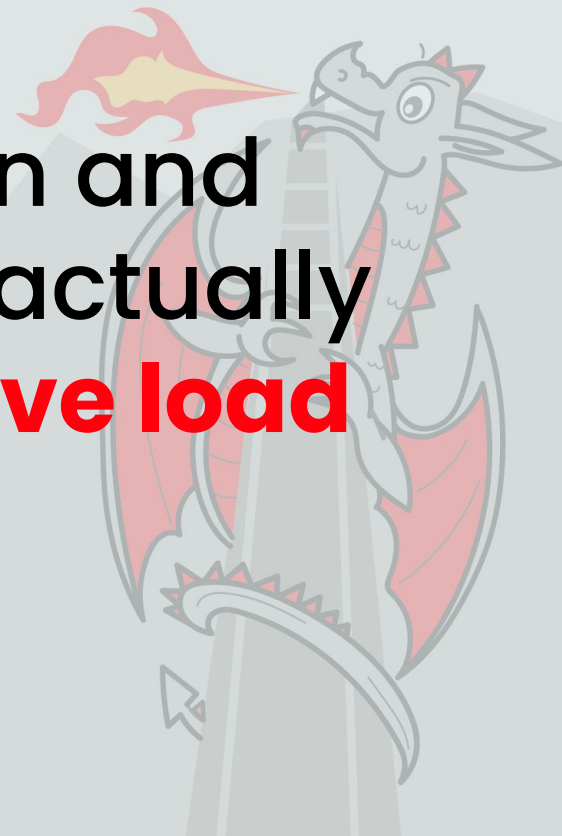


① Optimise for **team cognitive load**

② Excellent **Service Delivery**



ITSM's standardisation and  
governance approach, actually  
**reduces teams' cognitive load**



1. Eliminate Guesswork and take away the Administrative Headache.

# Extraneous cognitive load



2. Enable continuous Improvement  
reduces waste and creates a culture of  
learning.

**Intrinsic cognitive load**





### 3. Reporting and metrics provide visibility and aides decision making.

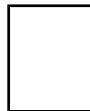


## 4. Transposable behaviours, natural facilitators help support DevEx.



# Support Triage & Major Incidents





In cinch – we have squads aligned to value streams that build, ship and **support** their services and components.



# We don't have a Service Desk!



We have **automated** the vast majority of what a traditional service desk does



But there are **always** things  
that fall outside...



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That's where **Service Delivery**  
come in.

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We focus on ensuring  
**ownership**, and bringing  
squads together to  
**collaborate** & swarm to  
resolve.



For this to work, the squads  
need to buy into the  
**“so-what”**



This meant that 'traditional' ITSM  
SLA's wouldn't work.





DORA metrics



Component based SLO's



Error budgets.



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# Major Incidents



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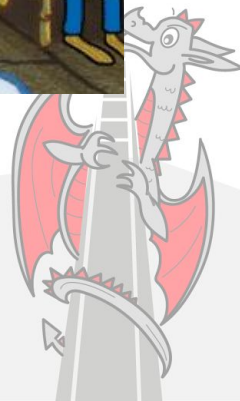
# Who here enjoys Major Incidents?



Who in here ideally  
want's **0** major  
incidents?

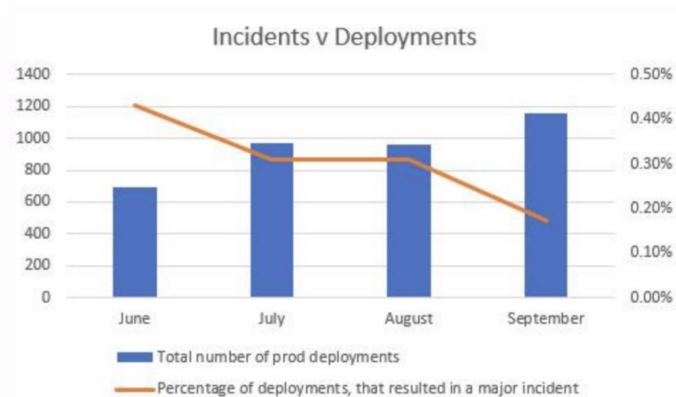


Everything since day one  
has been built on the  
concept that we are  
expecting... almost  
wanting...  
Major incidents...





# Hundreds of humans, making over 200 changes a day



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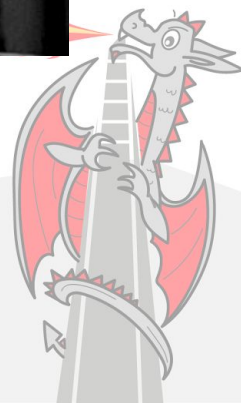


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Incidents, lead to **enquiry,**  
**learning, knowledge &**  
**improvement**



It's also important  
to **not just wait** for  
Incidents to  
happen...



# Ceremonies



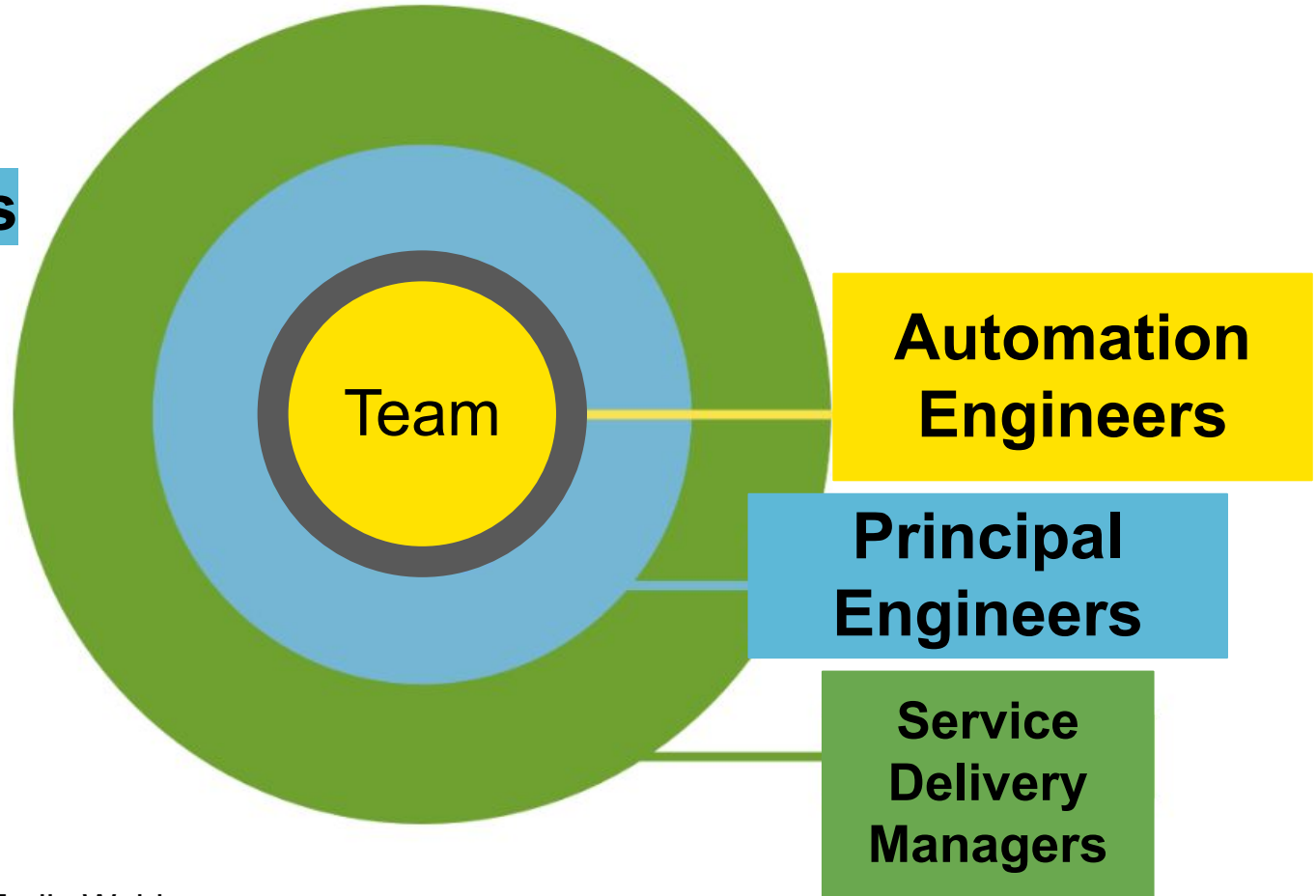
Service Delivery, **collaborating**  
with other supporting roles  
help facilitate ceremonies



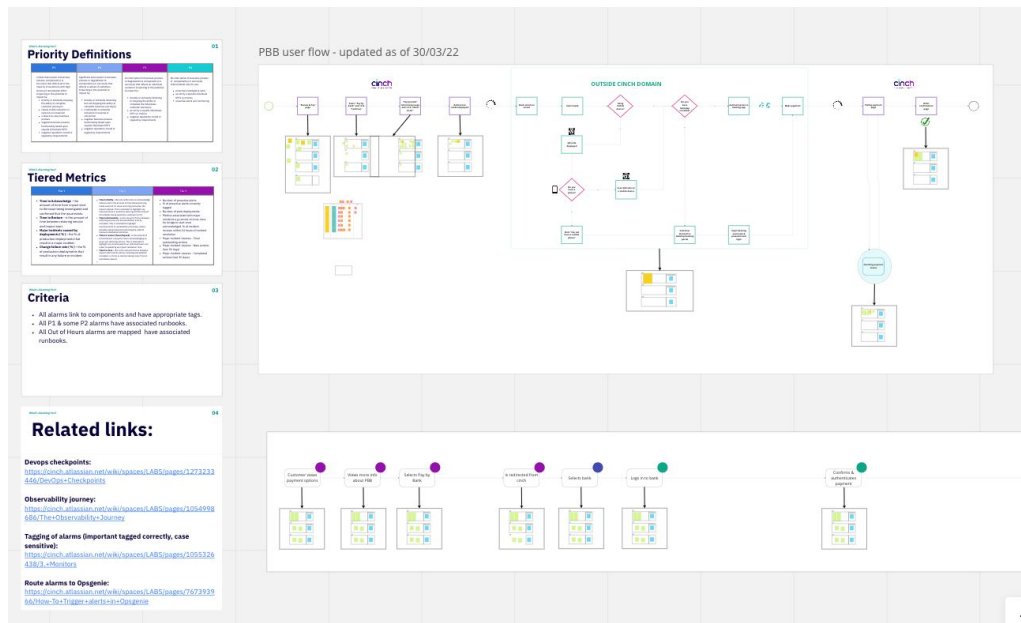
**Core**

**Collaborators**

**Supporters**



# What's Alarming You



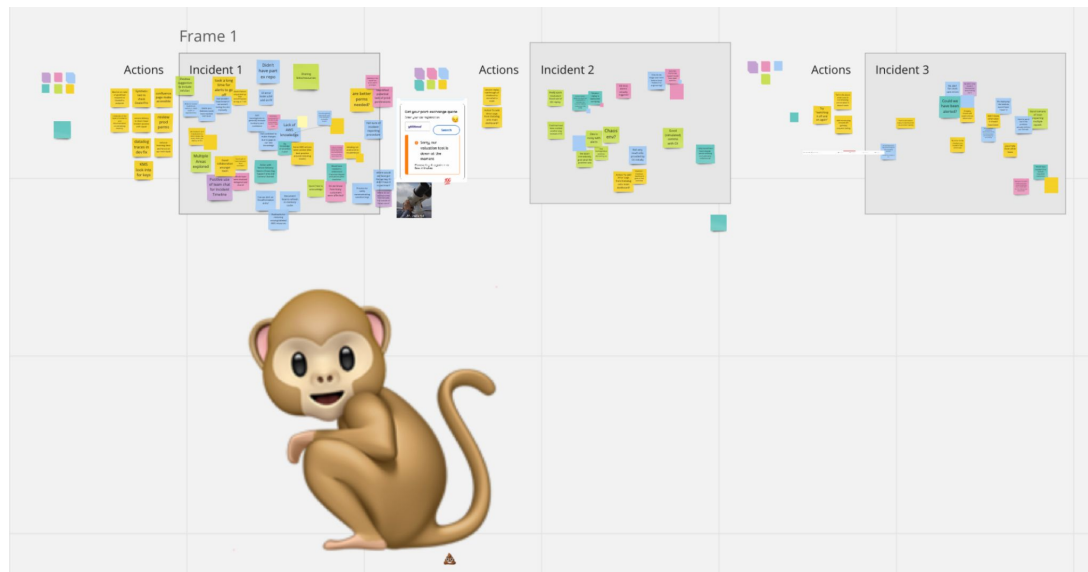


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# Chaos Day's



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# Service Readiness



**#WTFisSRE**

# Who here has been part of CAB before?



Who has had  
to **seek**  
**authorisation**  
for their own  
release?



# Change Control does serve purpose.



- ✓ Support Continuous Improvement
- ✓ Promotes Transparency
- ✓ Facilitates compliance
- ✓ Enable better coordination
- ✓ Minimises service disruption  
(Think Change Failure rate)



How do we **bring in that value,**  
whilst avoiding any impact to  
fast-flow autonomous  
delivery?



# Service Readiness



This page is designed to give guidance in relation to Gold & Silver releases as defined within [Service Readiness](#) completed to ensure adequate due diligence is undertaken prior to a large release.

A copy of this template should be made and published within the relevant project space and your aligned [Service Delivery Manager](#) contacted to help guide you with the process.

- High Level Description:
- Key Dates and Times:
- Key Contacts:
- Release Plan:
- Risks:
- Test and Training Plan:
- Rollback Plan:
- Observability: Features, Components & Monitoring (add out of hours):
- Hypercare Activities:
- Status Key:
- ☒ Checklist:
  - 1.0 Communications
  - 2.0 Information Security, Data Protection and Compliance
  - 3.0 Incident Management
  - 4.0 Service and Supplier Management
  - 5.0 Stakeholder Awareness:





# Service Readiness basics

- ✓ Trusted documentation helps
- ✓ Awareness, not approval
- ✓ Driven by the team
- ✓ Adaptable for multiple scenarios
- ✓ Hypercare - Done is not done ☐



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# To wrap up

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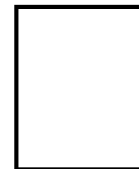
# Build



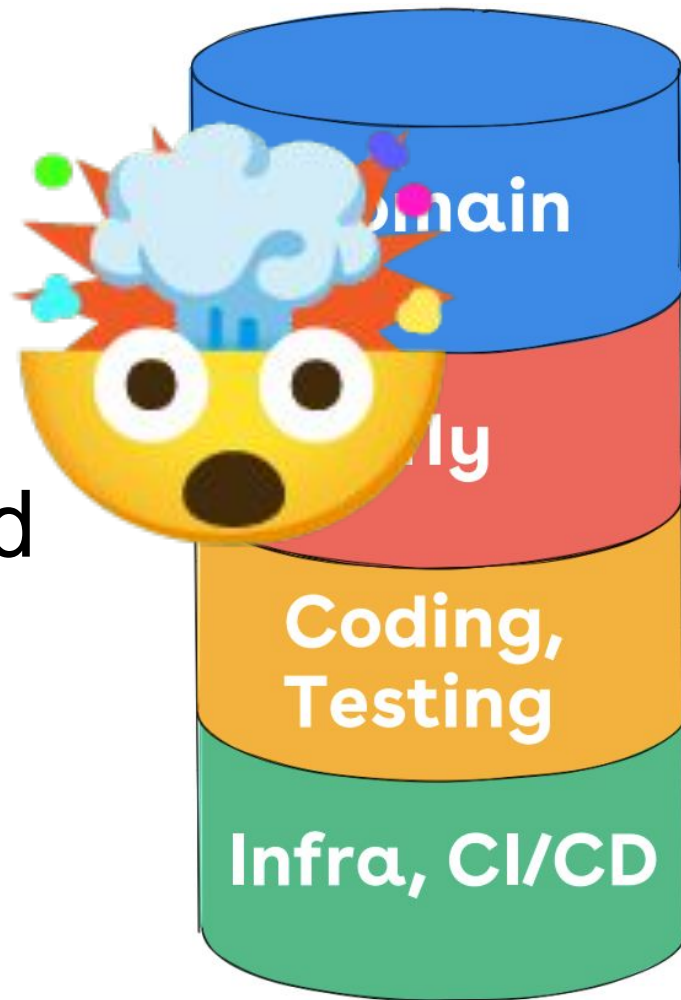
# Ship



# Support

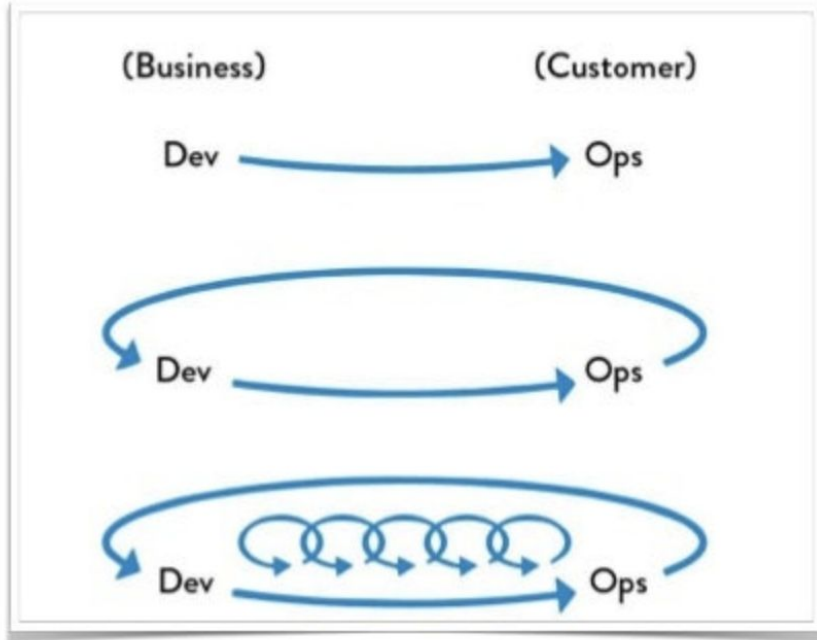


# Team cognitive load

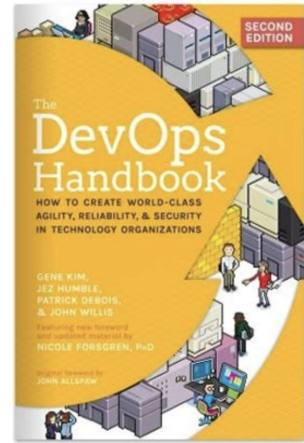


# DevOps

## The Three Ways



- 1 Flow
- 2 Feedback
- 3 Learning



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ITSM **enables** DevOps = **Flow**

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# Support triage & Incident Management



**#WTFisSRE**

# Ceremonies



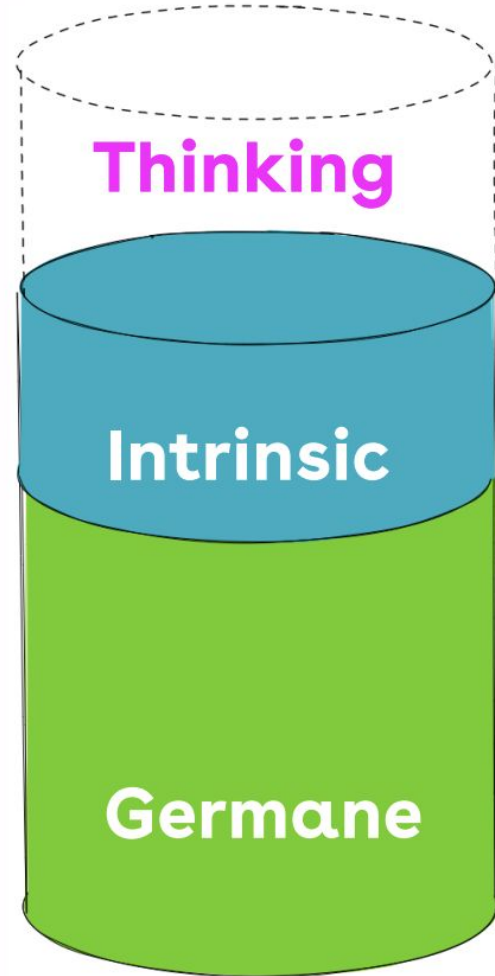
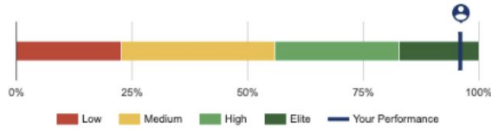


## Your software delivery performance

Your performance:

**Elite**

You're performing better than 96% of [State of DevOps Survey](#) respondents. 🏆



A “DevOps person”, **advocating for Service Delivery** done the “DevOps” way



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# Thank you!

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# Any questions?



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