Building better software together

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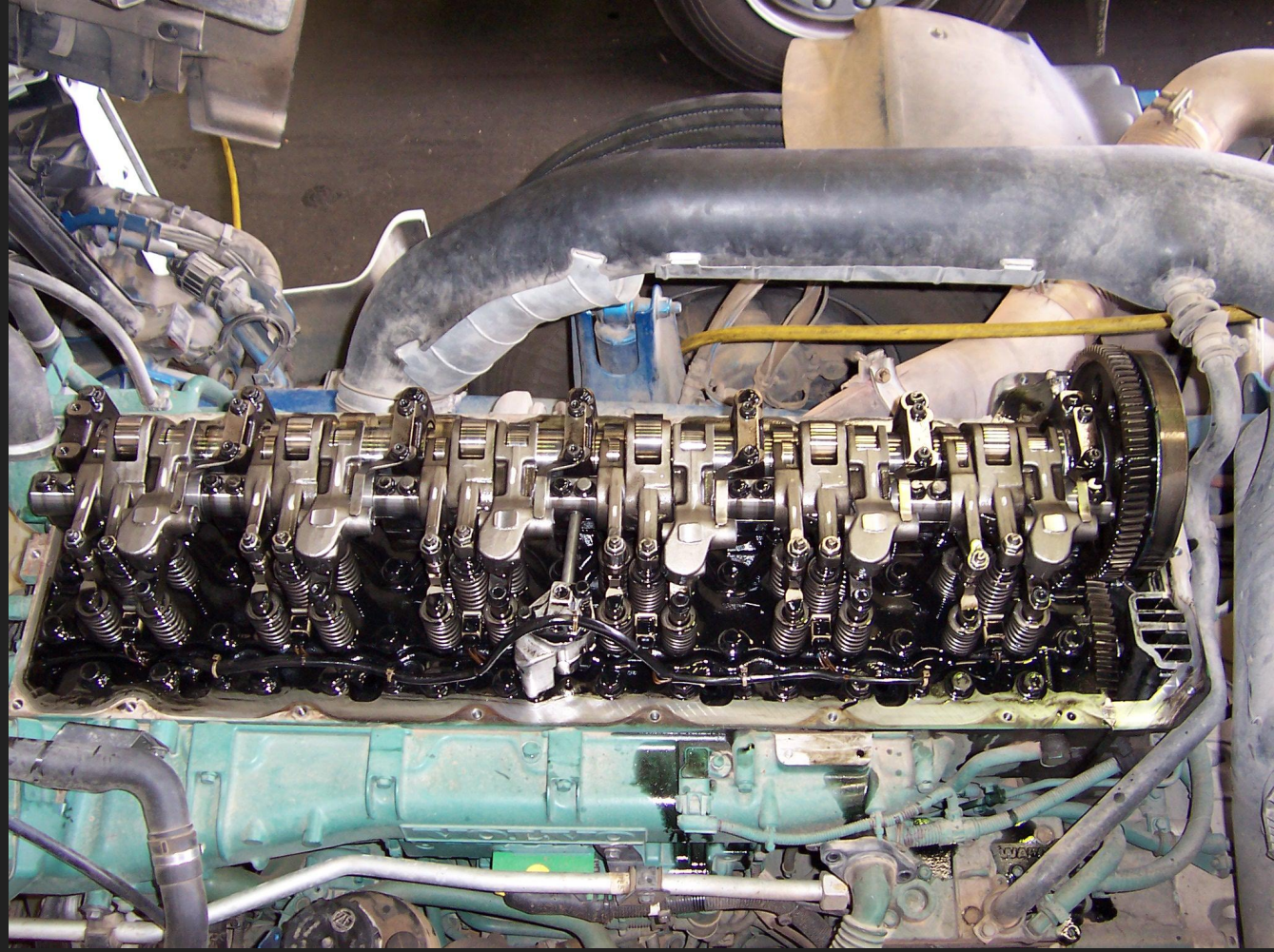
Complicated Machine



Panoha (CC BY-SA 3.0)

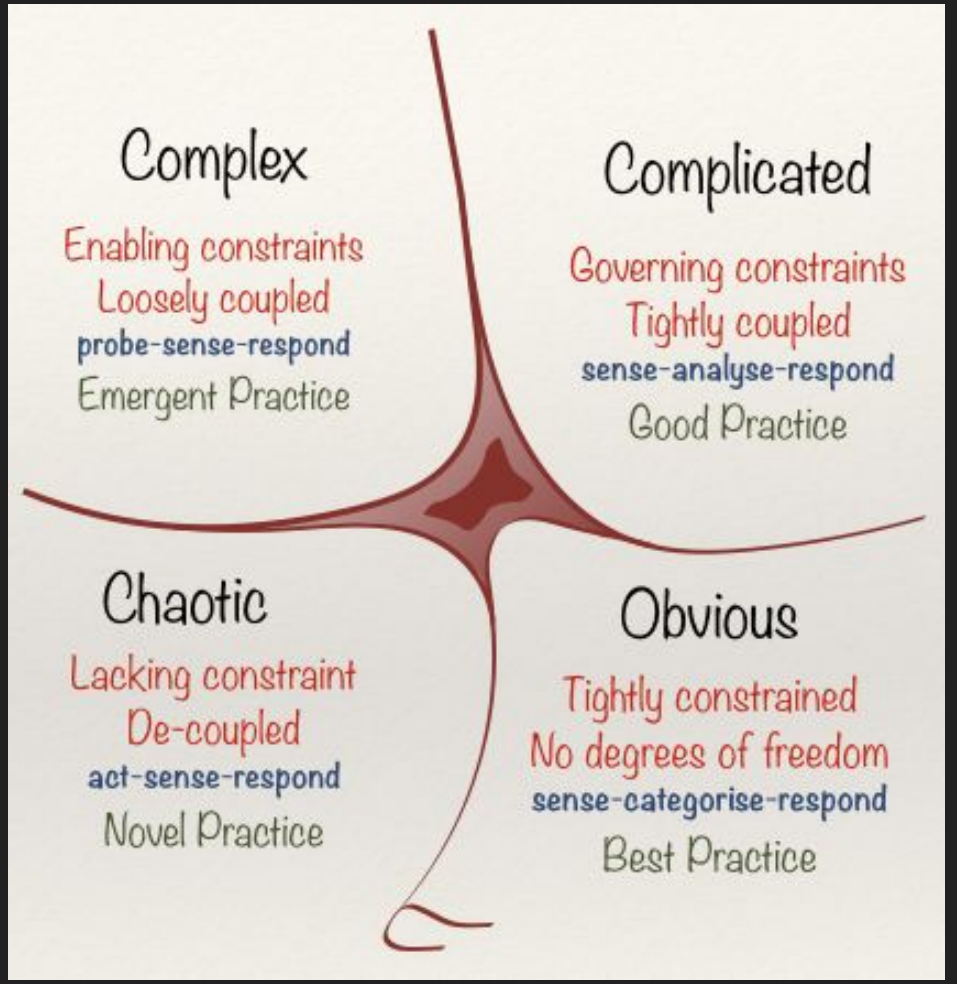
Complicated Problems

Max Pixel (CC-0)

On Blame

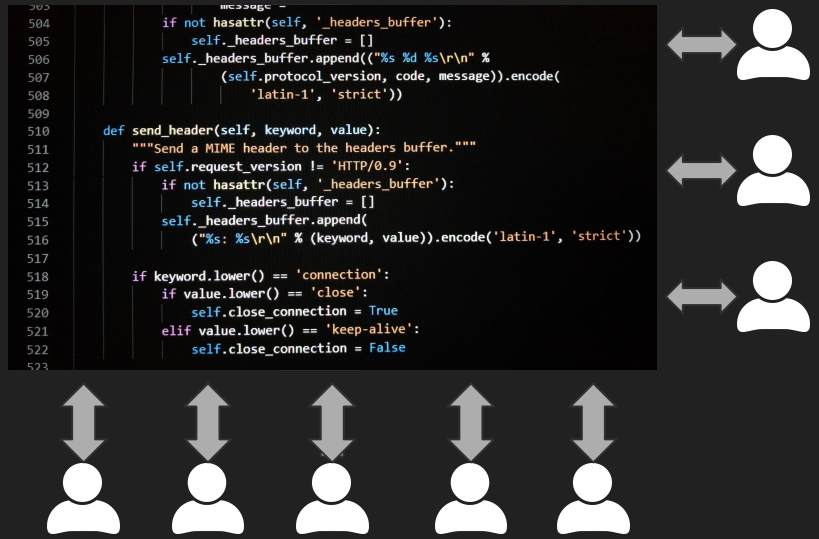
Max Pixel (CC-0)

Cynefin Framework

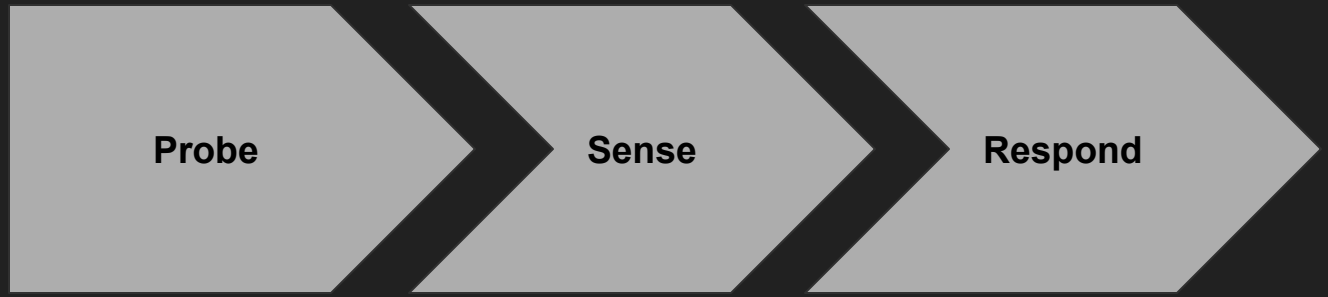


Snowded (CC BY-SA 3.0)

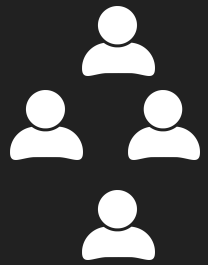
Complex software



Cynefin Complex Domain



Complex analysis



How should I run my own post-mortem process?

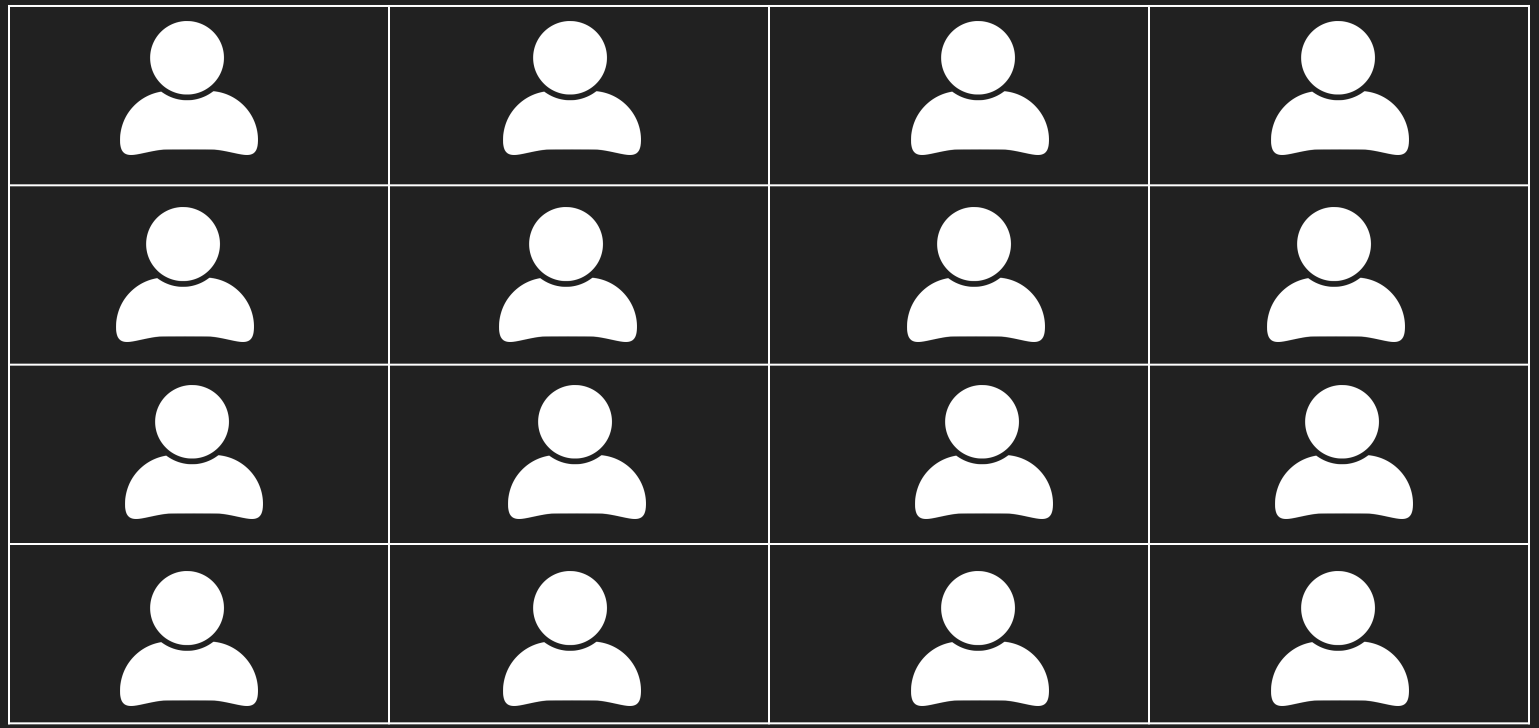
“It depends”

Analysis != Response

1. Incident response - fix production
2. Incident analysis - improve resiliency

Analysis facilitators

Call time!

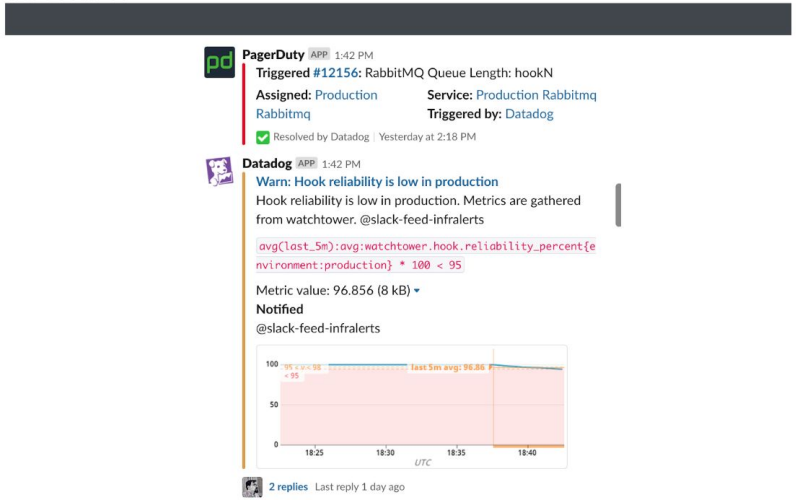


Call: objective record

- <18:43 Z>: Noticed DataDog warning and attributed it to rotating http_hooks_v2 instances - [redacted] https://zapier.slack.com/archives/[redacted]
- <18:44 Z>: Last new instance was launched
- <18:46 Z>: Datadog alarm on hook publish volume drop https://zapier.slack.com/archives/[redacted]
- <18:51 Z>: [redacted] says “let’s roll back Terraform config change, switching back to the old AMI”
- <18:53 Z> Terraform change created for rolled back https://github.com/[redacted]
- <18:54 Z> Terraform change approved by [redacted]

Call: systems analysis

- The PagerDuty and DataDog #infra-alerts posts arrived roughly simultaneously. The PagerDuty triggered was red. The DataDog warn was orange, and bigger, overshadowing the importance of the first. Two minutes later, a DataDog triggered alert occured:



  - This kind of PagerDuty RabbitMQ queue length alert sometimes appears for benign reasons. It doesn't necessarily require action.
  - Let's tweak levels so there's no warning anymore - either green or red.
  - Check LoadBalancer health checks - how do we make it obvious to do this at that point in time?
    - We could add actionable things into DD alerts

Call: Action items

Improvement name	Owner	Details	Bug/ticket link
Investigate [redacted]	[redacted]	• [redacted]	https://zapierorg.atlassian.net/browse/IE-1457
Why u no sentry?	[redacted]	• Did we get a sentry report? If not, why not?	https://zapierorg.atlassian.net/browse/SX
		• If so, why didn't we see it?	P-794

Communication & improvement

[redacted]

Hi everyone would love feedback on another postmortem we have conducted

https:/[redacted]/p/post-mortem-app-landing-pages-overlapped-between-role-and-secondaryslug-causing-404-2019-06-10

3 replies Last reply 1 month ago

References

Cynefin

- HBR introduction
- Kurtz & Snowden paper

Other Reading:

- How complex systems fail
- Jessica Kerr on Symmathesy
- Faun on post-mortems

Post-mortem techniques

- 5 ‘why’s
- Infinite Hows

Human Error Analysis

- Woods, Dekker: ‘Behind human error’
- Dekker: ‘Drift into failure’

Thank you!

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We're hiring! https://zapier.com/jobs/

Talk slides

available here:
https://github.com/thomir/talks