Engineering for resiliency

minimising incidents and mitigating your key risks
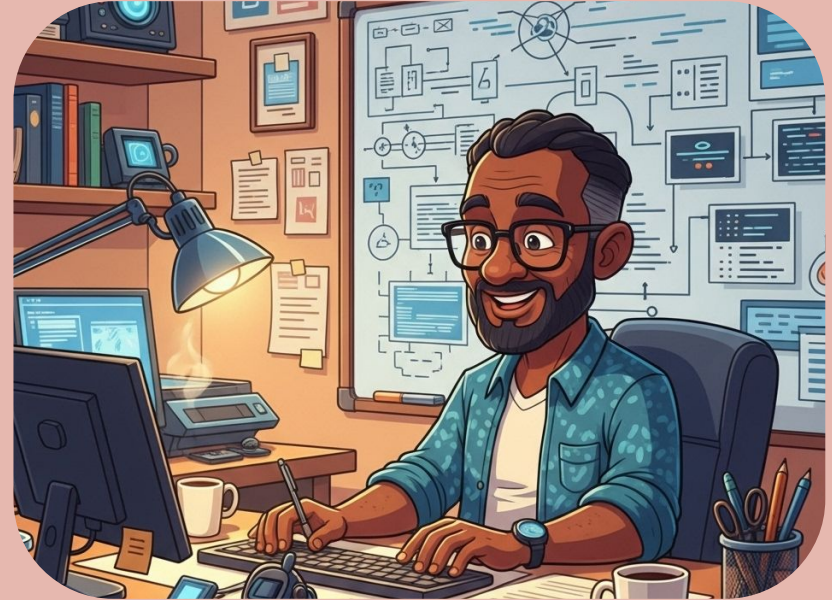
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Today's workshop

- **Part 1: identifying & mitigating risks in your organisation**

- **Part 2: responding when things go wrong**

Hello 👋

Introduce yourself!

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What do *I* mean by resiliency?

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"...designing and building systems, infrastructure and processes that can withstand, adapt to, and recover from unexpected disruptions, shocks, and changes"

Anti-fragility

Identifying & mitigating risks

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Frameworks/strategies

- **RCSA**

- **Pre-mortems**

- **Post-mortems**

- **Game days**

- **Controls testing**

Using data to help

- **SLOs**

- **Error budgets**

- **Control effectiveness**

- **No repeat incidents**

Activity

1. **Think through the top 2-3 risks you have in your org today re: engineering resilience**

2. **Share what they are and how you identify those risks today**

3. **Think through what you're *actually* doing about them — are you doing enough**

When things go wrong

Banks to pay customers millions after month's worth of IT outages

Heathrow boss sorry for sleeping through outage with phone on silent

customers locked out of app

SECURITY

SOCIAL

APPS

Reddit is down again

s experience global outage

Your response is what your customers will remember

Respond quickly

- **Invest in tooling**

- **Defined roles for response**

- **Clear escalation paths**

- **Cross-functional support**

- **Practice!!!**

Communication strategy

- **Transparent by default**

- **Template-driven**

- **Tailored messaging for different stakeholders**

- **3 C's of crisis comms — clear, consistent, compassionate**

Decision making

- **Remove humans where possible**

- **Outline your principles for decision making**

  - **Rollback or fix forward?**

  - **Define your impact tolerances**

  - **Who makes the decisions?**

Invest in learning

- **Post-mortems**

- **Focus on systems; not individuals**

- **Track and ship the improvements you identify**

- **Celebrate the unglamorous!**

Activity

| Responding quickly | Ready-made comms strategy | On-rails decision making | Post-incident learning |

Rate each capability for your organisation 1-5; then discuss

Thanks!

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