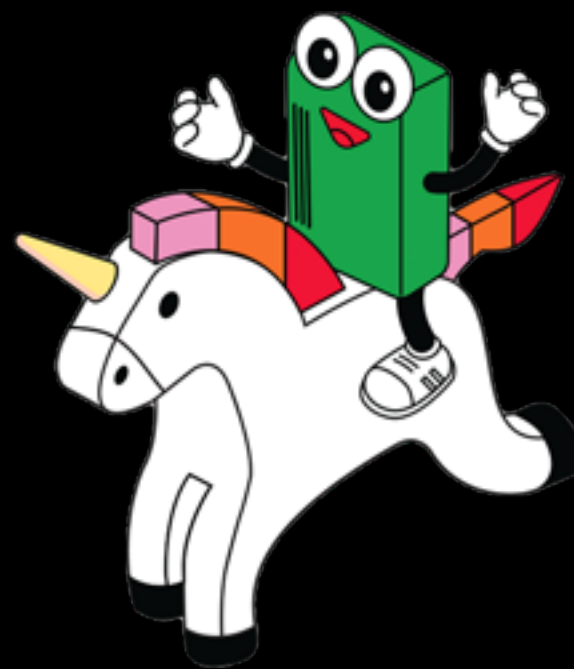# Resilience for Retail

A Tale Not About Ice Cream
But Somehow Also About Ice Cream

Quintessence Anx
DevOps Advocate @ PagerDuty

PagerDuty

@QuintessenceAnx

Don't panic

LIFE IS AMAZING

Elevated response period

@QuintessenceAnx

How to determine your Elevated Response Period

What support is needed

PagerDuty

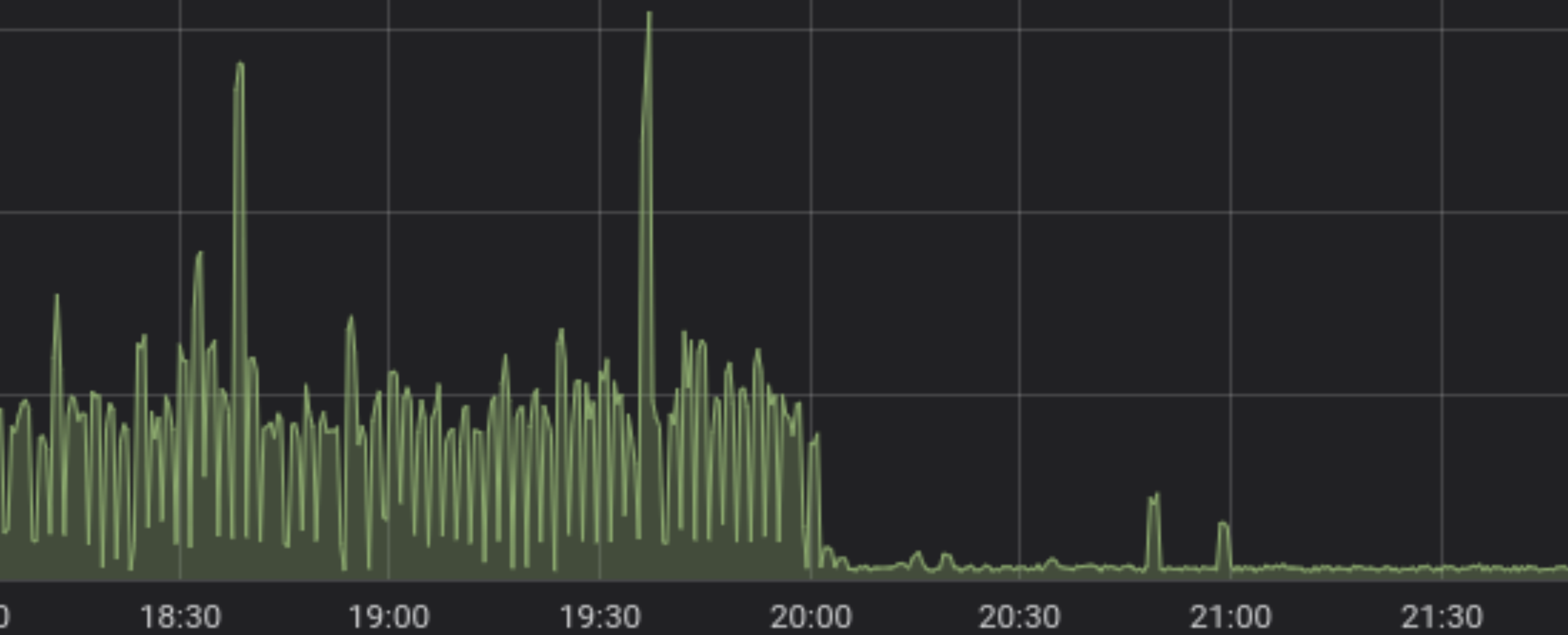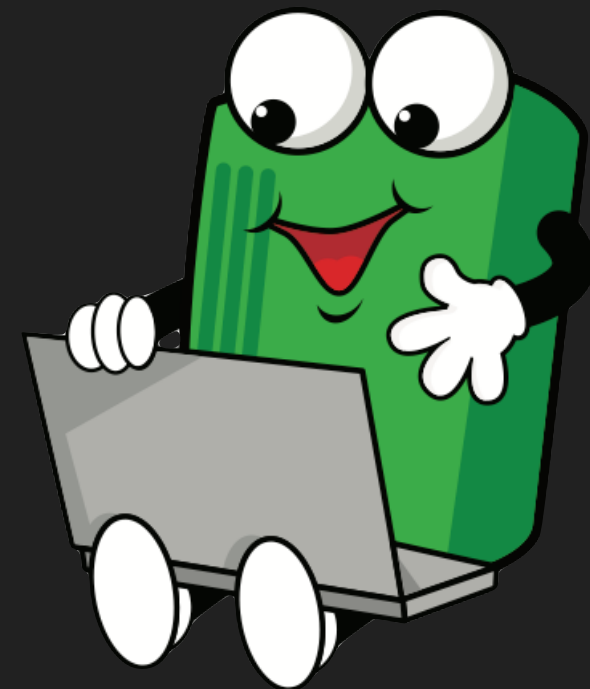@QuintessenceAnx

Build or Buy 💻 :: Make or Buy 🍦

PagerDuty

v0 Architecture

Random Outage Graph

What, When, Where

Let's Talk a Little About Resiliency Itself

A resilient system is a system that is able to withstand adversity.

@QuintessenceAnx

Something is resilient if it is able to withstand adversity.

PagerDuty

@QuintessenceAnx

What can this look like?

PagerDuty

Organizational Resilience can look like having the appropriate response structure(s) in place for IT systems, services, and users in the event of a latency or outage.

(IT) System Resilience can look like an application not going down, and/or autoscaling, in response to increased traffic.

Why is this important?

Response and Design

@QuintessenceAnx

Resilient Response

@QuintessenceAnx

Resilient Response Checklist

- Define elevated response

- Maximize experienced responders

  - Both primary and secondary

- <u>Do not design around resources you do not have</u>

- Minimize responder burnout

- Clear handoff procedures

- Clear ownership

- Dedicated, clear, responder roles

- Practiced response process

- Validate responder access to tools and data

- Updated documentation

PagerDuty

Define elevated response

Maximize Experienced Responders

PagerDuty

Do not design around resources you do not have

@QuintessenceAnx

Responder Burnout

@QuintessenceAnx

Clear Handoff Procedures

PagerDuty

Clear Ownership

Dedicated, clear, responder roles

PagerDuty

Practiced Response Process

@QuintessenceAnx

Validate access to tools and data

@QuintessenceAnx

Updated documentation

PagerDuty

Resilient Response Checklist

- Define elevated response

- Maximize experienced responders

  - Both primary and secondary

- <u>Do not design around resources you do not have</u>

- Minimize responder burnout

- Clear handoff procedures

- Clear ownership

- Dedicated, clear, responder roles

- Practiced response process

- Validate responder access to tools and data

- Updated documentation

PagerDuty

@QuintessenceAnx

Resilient Design Checklist

- Build, test, secure with scalability in mind

- Build, test, secure with humans in mind

- Build, test, secure with redundancy and/or failover in mind

- Build, test, secure with operator control in mind

- Build, test, secure with observability in mind

- Automate as much as is feasible

- Keep documentation updated in pace of releases

- <u>Do not design around resources you do not have</u>

- Clear ownership

  - Who owns the service, writes the code, etc.

PagerDuty

@QuintessenceAnx

Build, test, secure

@QuintessenceAnx

Build, test, secure: scalability

@QuintessenceAnx

Build, test, secure: humans

@QuintessenceAnx

Build, test, secure: redundancy / failover

Build, test, secure: operator control

Build, test, secure: observability

@QuintessenceAnx

Automation

Updated documentation

# Do not design around resources you do not have

Clear ownership

PagerDuty

Resilient Design Checklist

- Build and test with scalability in mind

- Build and test with humans in mind

- Build and test with redundancy and/ or failover in mind

- Build and test with security in mind

- Build and test with operator control in mind

- Build and test with observability in mind

- Automate as much as is feasible

- Keep documentation updated in pace of releases

- <u>Do not design around resources you do not have</u>

- Clear ownership

  - Who owns the service, writes the code, etc.

PagerDuty

Practice with Ice Cream 🍦
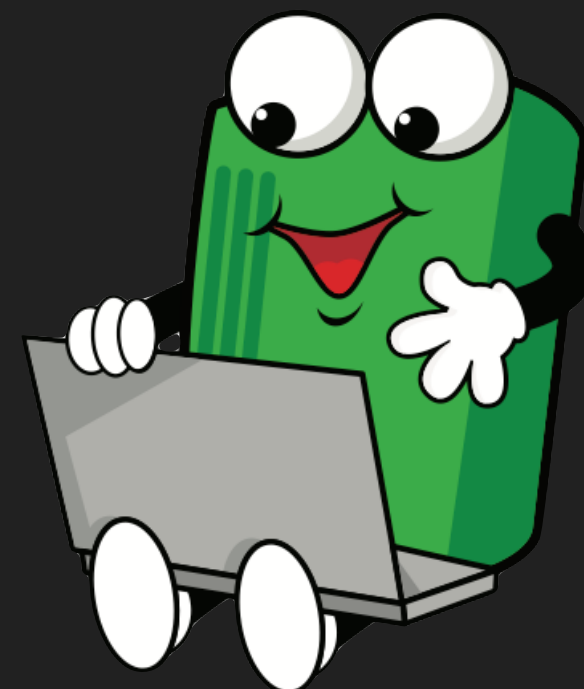
Understand the Business

@QuintessenceAnx

Resilient Response: Questions to Ask

- What cannot go wrong?

- What is at risk of going wrong?

- What responses are needed in each situation?

- Who is doing what step(s) in the response process(es)?

- Are we in an Elevated Response Period?

  - And are separate considerations for that period defined?

PagerDuty

@QuintessenceAnx

Resilient System: Questions to Ask

- How do we prevent "what cannot go wrong"?

- How do we mitigate risk for "what else can go wrong"?

- How do we support our response process(es)?

- How do we support our responders?

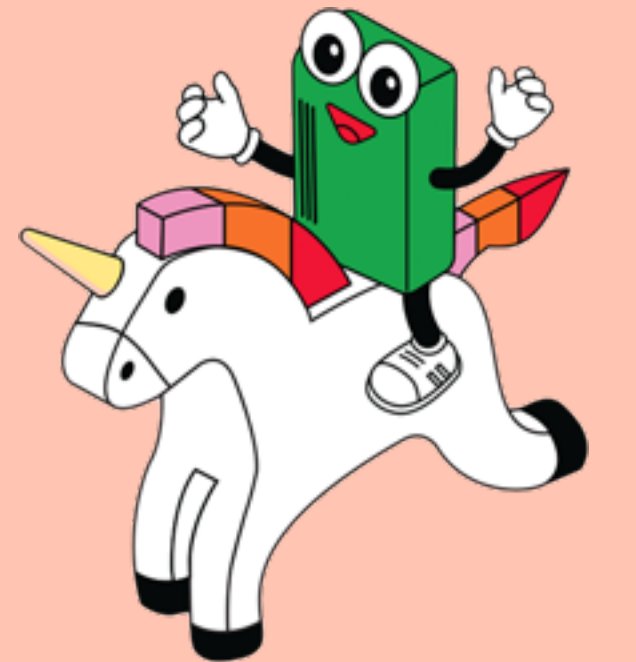- How does an elevated response period impact our system?

Resiliency is not limited to IT systems and personnel
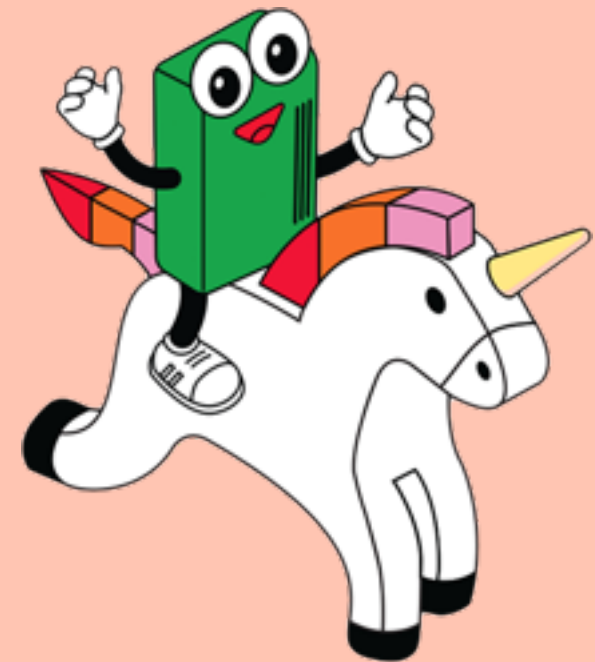
@QuintessenceAnx

Resources & References
noti.st/quintessence

Questions?

Quintessence Anx
DevOps Advocate

PagerDuty

noti.st/quintessence