



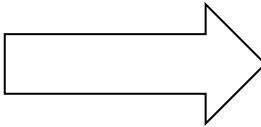
# Continuous Chaos in DevOps

# Agenda

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- **Cloud Evolution**
- **Anti-Fragility**
- **Cloud Detour**
- **Failure Types**
- **Q&A**

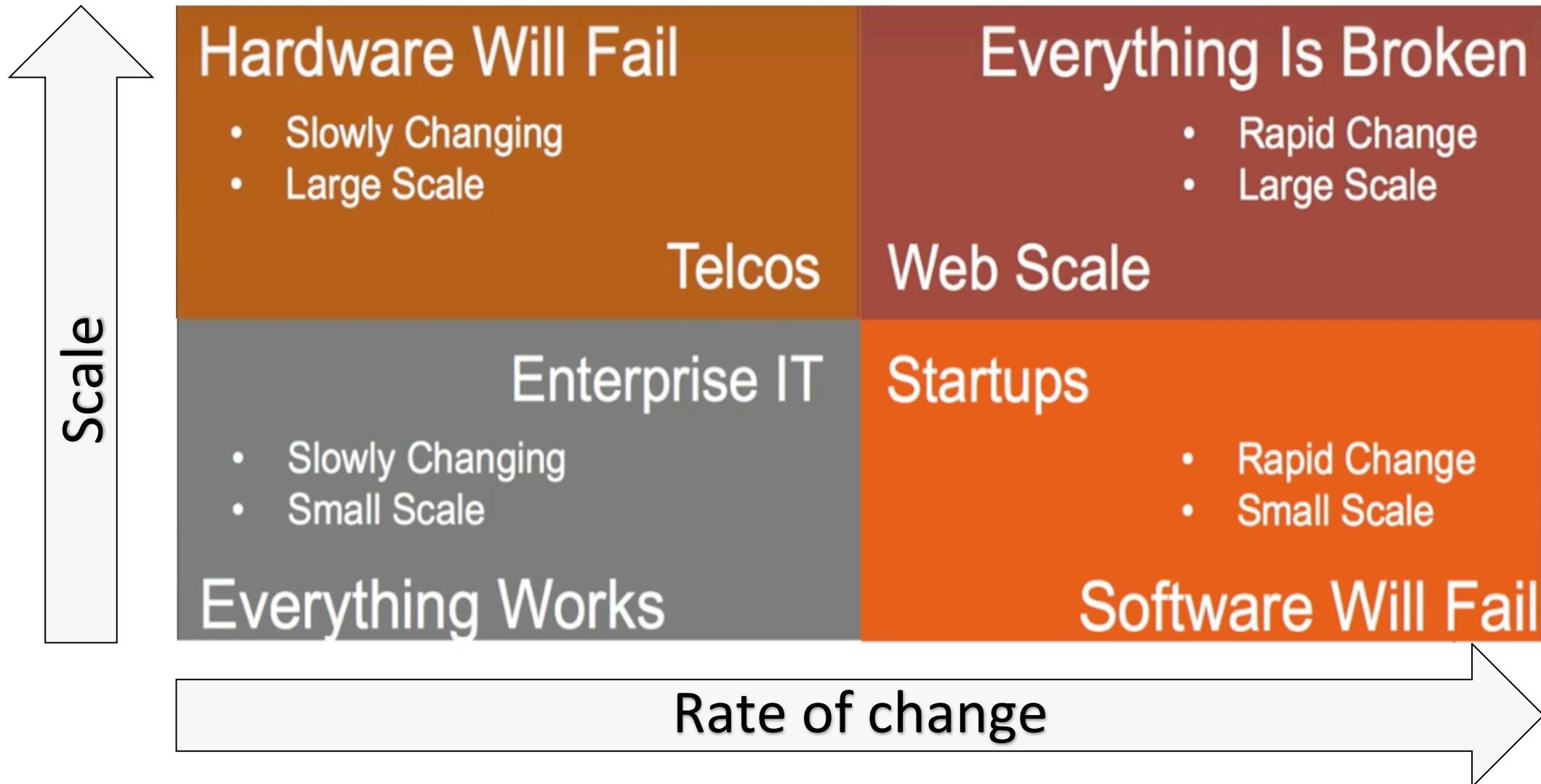
# How we evolved



**Monoliths**

**Micro services**

# Failures at scale and rate of change



its just a matter of time..

**“Everything fails,  
all the time.”**

— Amazon CTO, Werner Vogels

**“Be prepared.”**



# How do we navigate through this Chaos as an Organization?



Innovate

Ship It @Pace



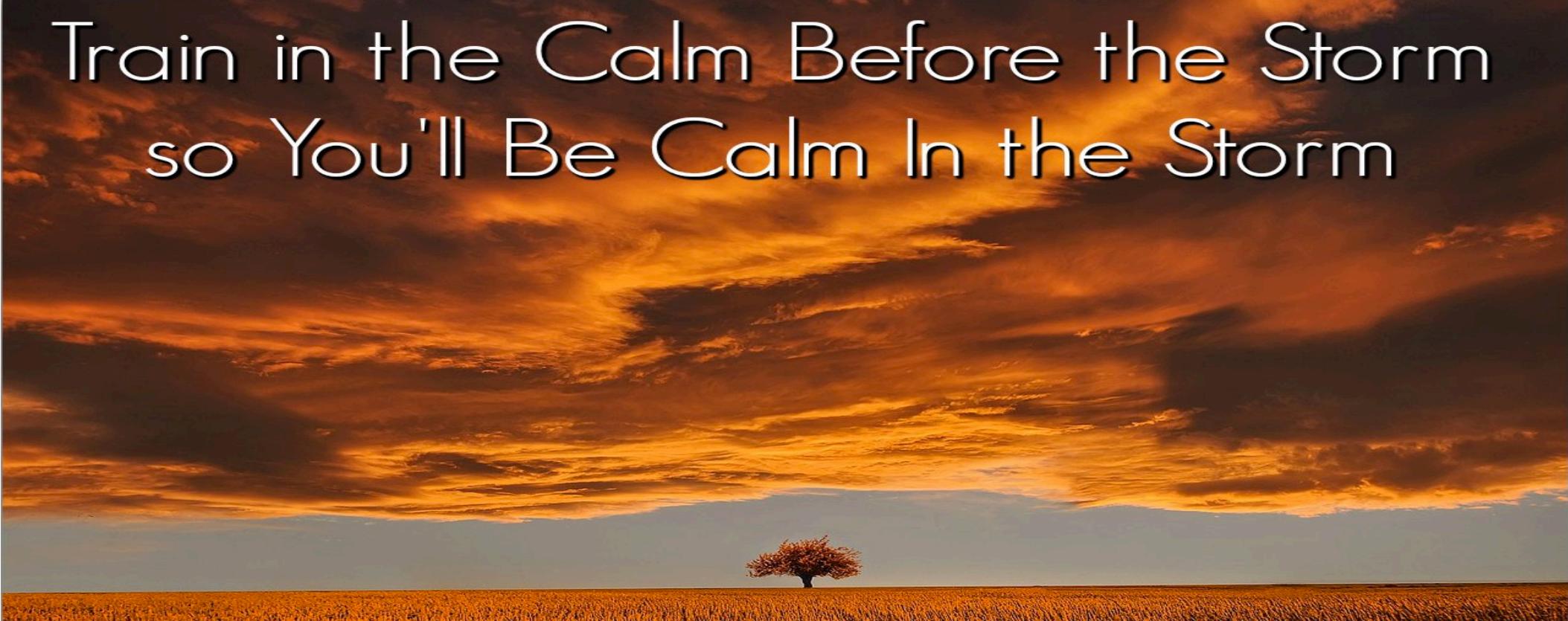
Availability

Reliability

Anti-Fragility

Resiliency

# Chaos Engineering in DevOps pipeline



Train in the Calm Before the Storm  
so You'll Be Calm In the Storm

**Create mini storms on live systems, forcing their remediation to increase degree of safety over time.**

# Cloud Detour is a Chaos Engineering Automation Solution

- Cloud provider outages are inevitable and we need a solution to test against those failures
- Traditional testing approaches can't predict all failure modes because of changing data conditions, complex request patterns, ever increasing innovation and growing scale
- Cloud Detour addresses the need for a chaos engineering automation tool by providing “Failure as a Service” for applications
- Integrates with DevOps pipelines to test resiliency of the applications

# Chaos for popular Cloud Services and Application requirements

**Cloud Service Disruptions**

**Cloud Provider Abstraction**

**Localized Disruptions**

**Approval Workflow**

**Health Checks and Pre-Conditions**

**APIs and Reports**

# We support many types of disruptions today..

Cloud Service	Disruption Type	Potential Applications
Auto Scaling Group	Reboot, Stop, Terminate, CPU, Memory, and Process	ASG Scaling Plans
EC2 instance	Reboot, Stop, CPU, Memory, Process, EBS, Network	Hogging & availability of EC2 Instance
ECS task	Stop	ECS Cluster Scalability
ElastiCache	Reboot	ElastiCache Availability
S3 Bucket	Deny access	S3 Unavailability
RDS	Reboot-with-failover, Reboot-without-failover	RDS Failover



# Q&A