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Benefiting from chaos engineering at Capital One

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Failures happen – Don’t panic – Be prepared!

Why and how Capital One uses chaos engineering

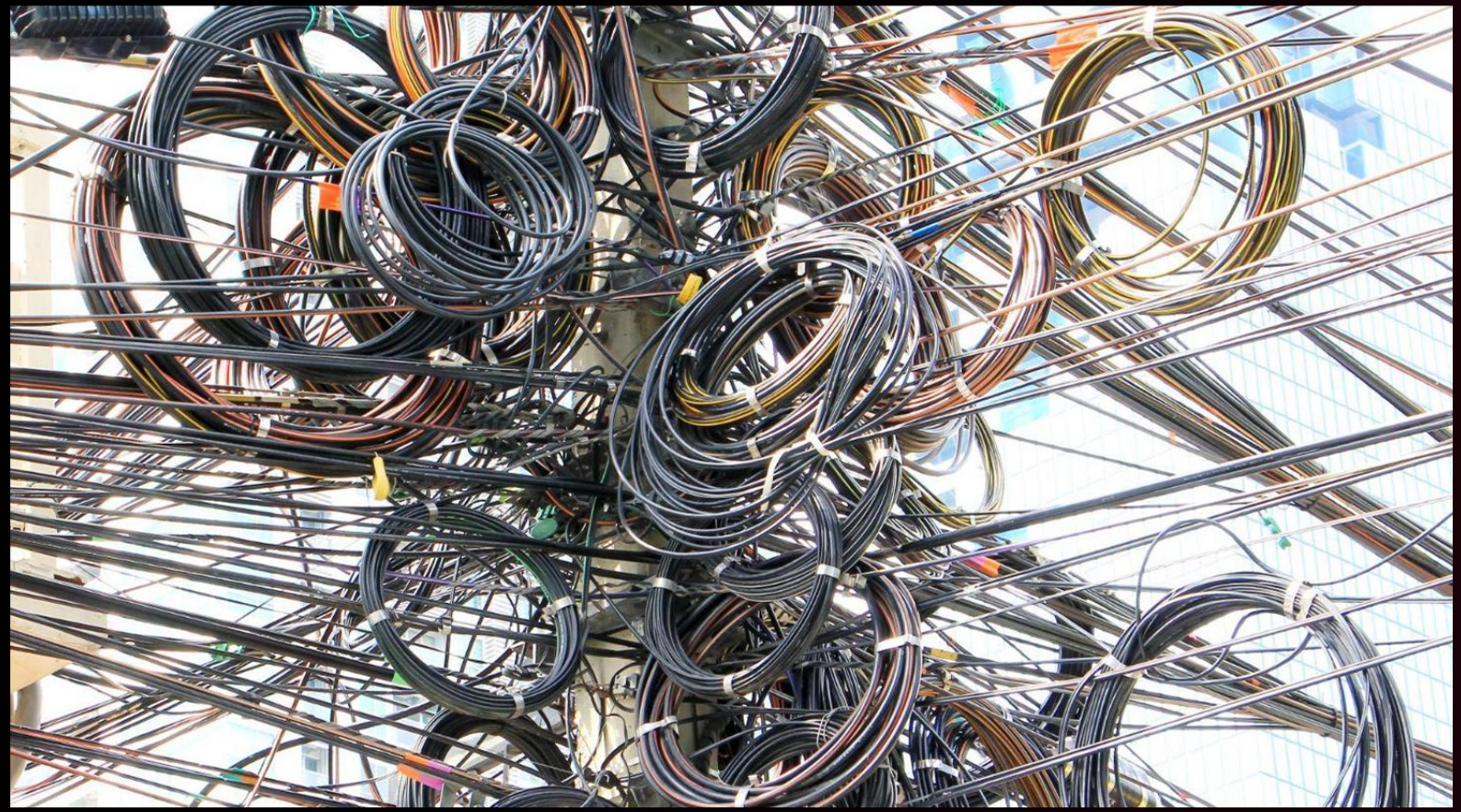
Key components of our chaos engineering practice

Our chaos experiment framework

Experiment objectives and common failure scenarios

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Integration of chaos fault injection into resiliency testing events



Why chaos engineering?

Chaos engineering in practice

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Chaos engineering components critical to our long-term resiliency testing strategy

Chaos experiment

- Experiment designer
- Experiment catalog
- Fault injection engine
- Testing results assessment
- Chaos playbook

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Our objective-driven chaos experiment framework







Objectives ❯ **Failure method** ❯ **Desired outcomes**

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Simulate real-world incidents to validate resiliency readiness objectives



Failure scenarios



Experiment objectives

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Key session takeaways

Minimize the need for software developers to be chaos engineering SMEs

Focus on simulating common real-world failure scenarios

Define chaos experiments focusing on resiliency objectives

Provide actionable results that improve application resiliency postures

Integrate chaos testing earlier in the application lifecycle

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