Production
Microservices

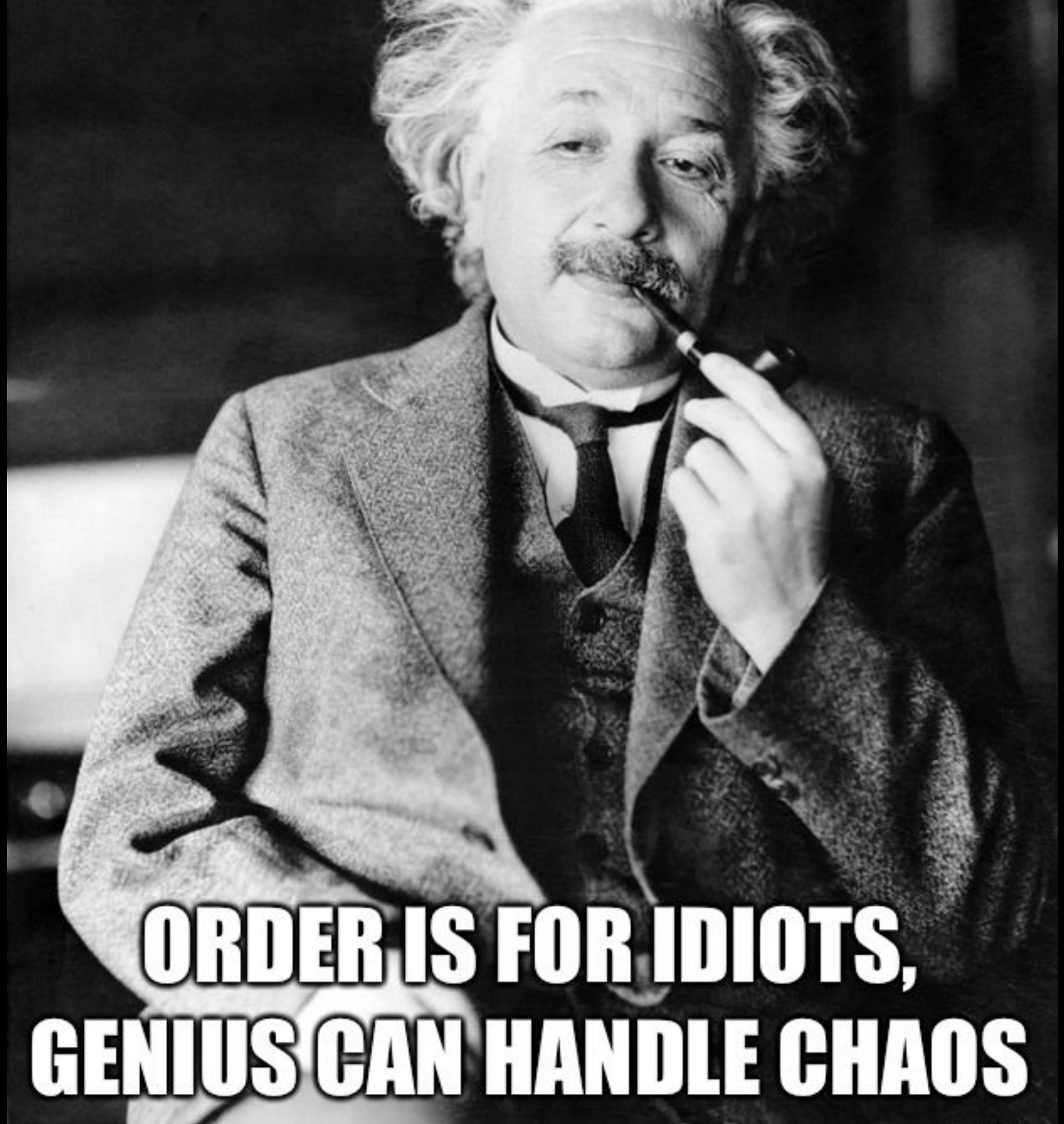
Chaos from Order

ORDNUNG

BRAUCHT NUR DER DUMME

DAS **GENIE**

BEHERRSCHT DAS CHAOS


ORDER IS FOR IDIOTS,
GENIUS CAN HANDLE CHAOS

Production …

Hates YOU

Essential Instability through Change

What do we *aim* for?

Fragility?

Robust/Resilient?

Antifragile

Antifragile

Systems

What is the core challenge?

Availability

Aggregate Availability

Time-Based Availability

What's your risk tolerance?

Consider…

Target Availability

Failure Types

Cost

Stressors-First

From Stressors to Objectives

From Objectives to Indicators

From Indicators to Agreements

Types of Failure to Consider

Infra

Infra

Hardware

Infra

Latency

Infra

Network Loss

Infra

Resource Exhaustion

Infra

Inter-Service Comms

Platform

Platform

State Transmission

Platform

Race Conditions

Application

Application

Functional

Application

Dependencies

Malfunction

People!

Application

Configuration

People

PEBKAC

Black Swans

Observability

Indicators

Actionable Information

How to get this??

How to get people to care about this?

Game Days

From Game Days to Chaos

Why *Chaos?*

Cynefin

We don’t know…

… what we don’t know

First Rule of Chaos…

Not just about pain

No surprises

Starts with a *Hypothesis*

What do you want to *Learn?*

To Probes

To Actions

Engage with all parties

Build Experiments…

Or thing to *try*…

Manual and Automated

Automated!

Repeat is Crucial

@russmiles

http://chaostoolkit.org

https://join.chaostoolkit.org

@chaostoolkit