

Test Driven Microservices

System Confidence through
Journeys, Traces & Contracts...

@russmiles

Microservices
HELL!!

CAPITA HIRED

mailjet

sk songkick



#LEAD
DEV





GEEK
HARLEY
DNA



EVERYTHING IS

AWESOME



Say "Microservices" one more time...







Humps for

A Definition...

The kingdom of heaven is like a mustard seed, which a man took and planted in his field. Though it is the smallest of all seeds, yet when it grows, it is the largest of garden plants and becomes a tree, so that the birds come and perch in its branches (Matthew 13:31-32).

- Of Mustard Seeds and Microservices (Micah Blalock) – <https://www.credera.com/blog/technology-insights/java/mustard-seeds-microservices/>

*“Loosely coupled service oriented
architecture with bounded contexts”*

**Loosely Coupled
Services that
*can change***

Which is GREAT!
but...

Testing in an
Uncertain World?

Confidence in an
Uncertain World

Welcome to

ACCEPTANCE

ENJOY THE JOURNEY

***Testing the Pieces is
Good***

But...





32,000

PIECES!

How to make sense?

***Confidence,
Comprehension,
Intent***

Across MANY
Microservices...

***We have a tool for
that...***

History...

story...



Stories are powerful

Utnapishtim

Noah

***Learning and
Comprehension
through Stories***

Confidence,
Comprehension,
Intent

The problem?

Front-end Only sucks

***Acceptance in
Microservices is Across
Pipeline***

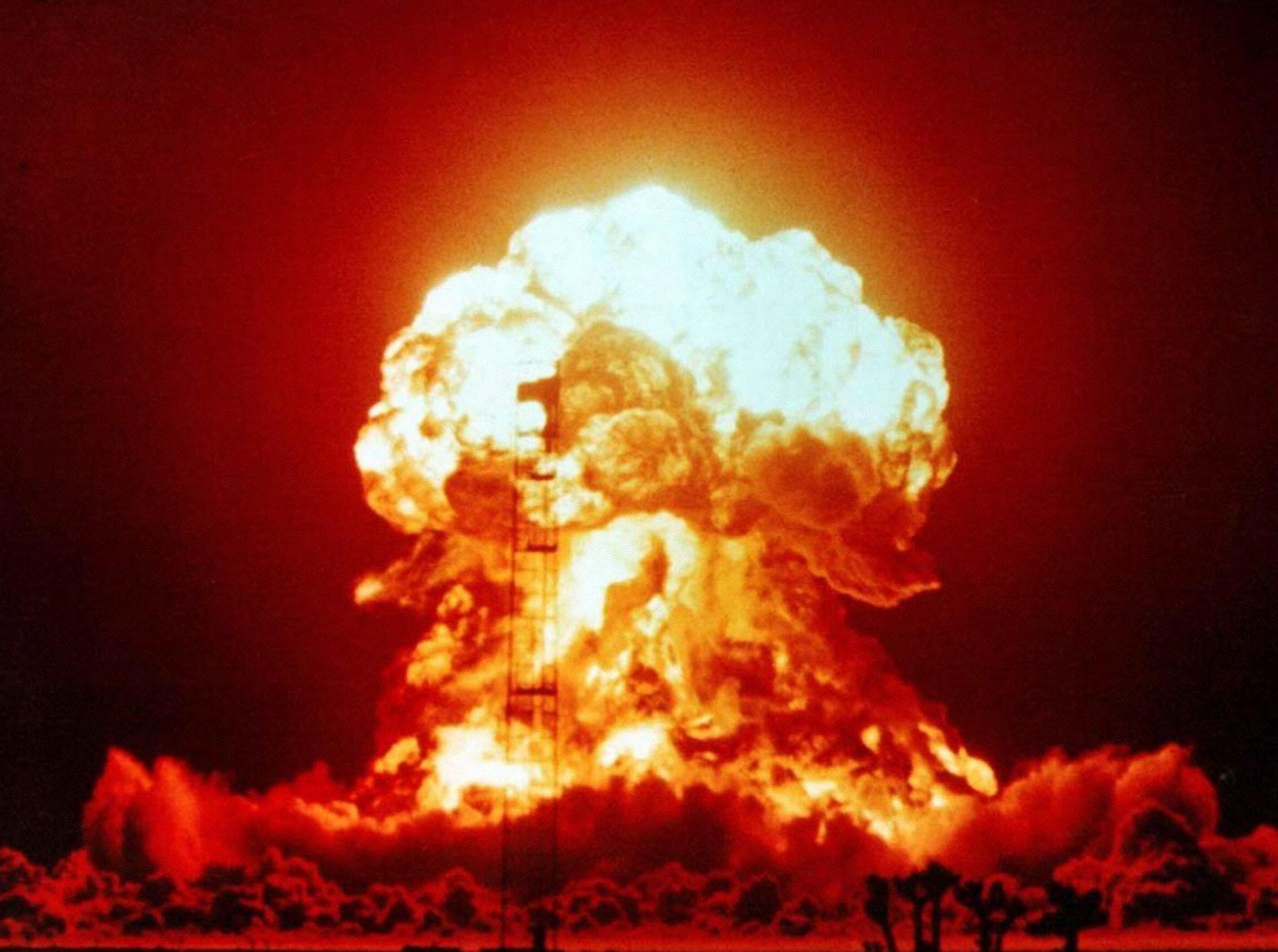
Introducing 'Journeys'

***Introducing
'Pipeline Journeys'***

Just expectation?

‘Live too’

That's all good but...



Change?

*Even Drop-in
Replacement can be a
Challenge!?*

But there's worse...

Contract Change



**?it Happens...*

We need to deal!

Event Sourcing is Key!

Size
doesn't matter

SLOC doesn't matter

Cognitive Overhead
DOES

*What can your System
DO?*

WT*?!







450 GENERIC

The real problem?

The general problem...

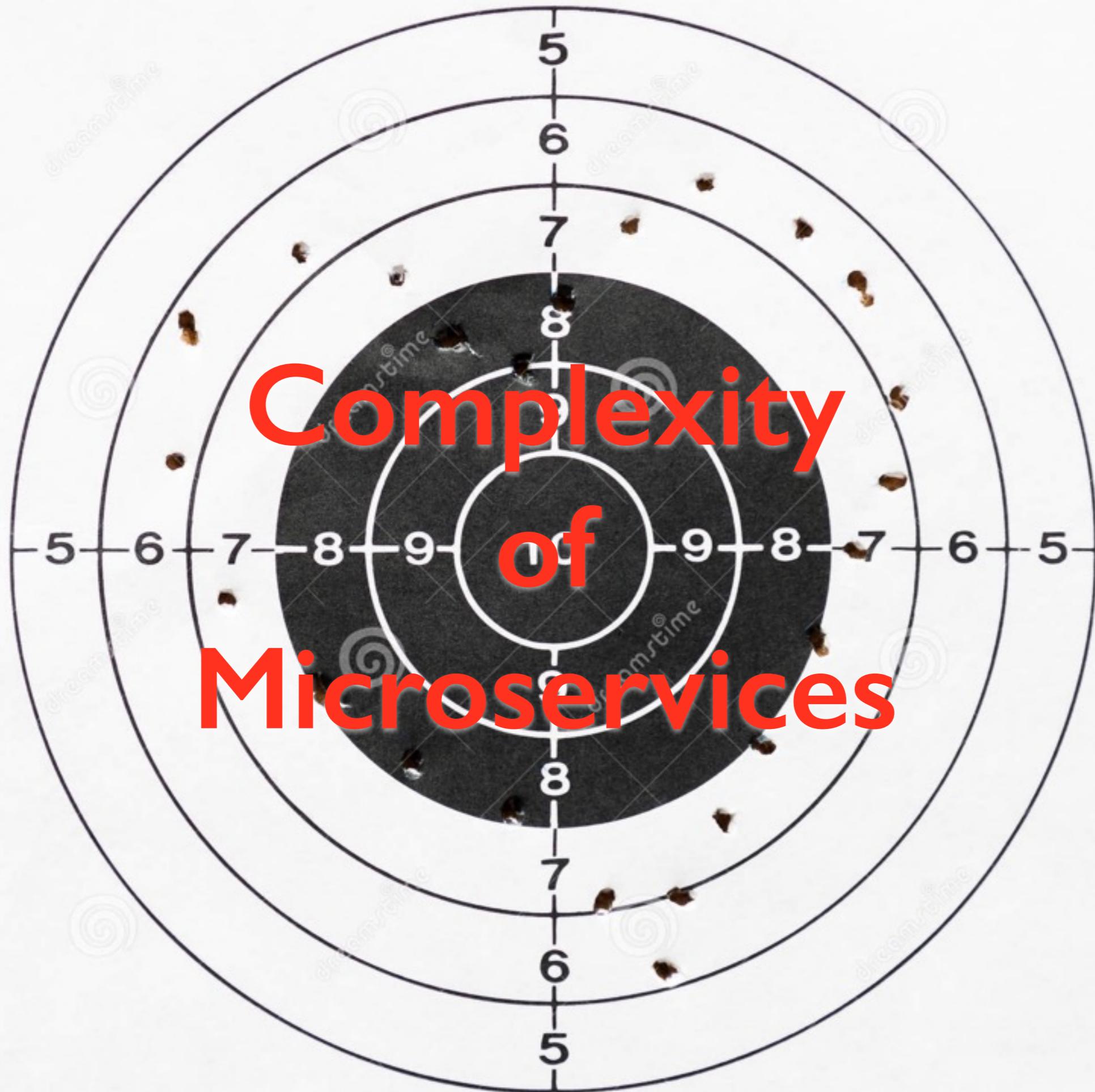
UX

d **ULX**

do **JLX**

bdo **JUNX**

SUNX



Complexity of Microservices



A target diagram consisting of concentric circles. The innermost circle is labeled '8'. The next ring is labeled '7', the next '6', then '5', '4', '3', '2', and the outermost ring is labeled '1'. The text 'We can do better' is overlaid in the center of the target. There are several small white dots clustered in the center, representing a bullseye or a point of focus.

We can do better

We can do much better



***We have done this
before...***



Java[™]

J2EE



Simplify Enterprise Java



Simplify Microservices



What can you do?

Antifragile Software

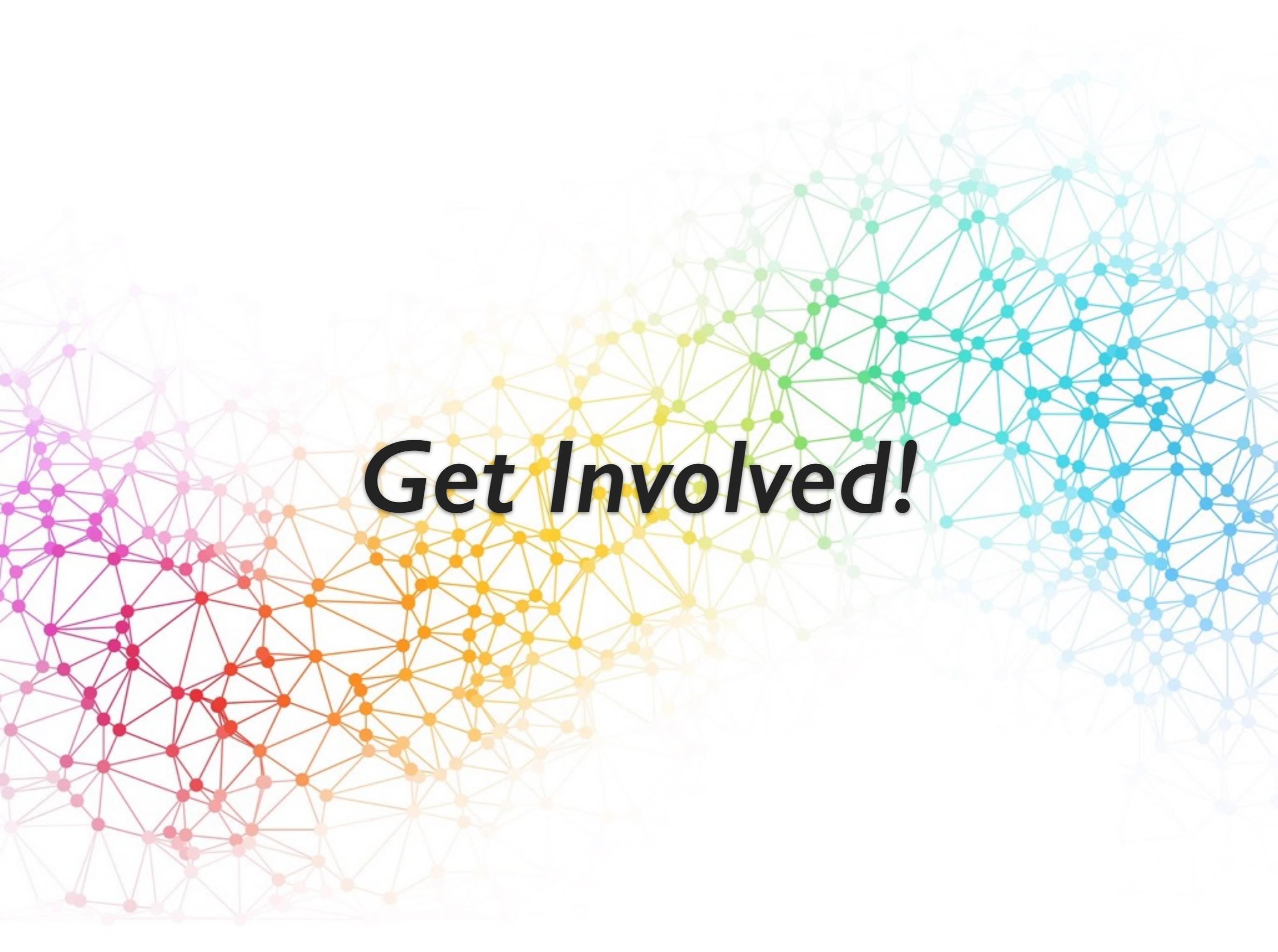
Building Adaptable Software
with Microservices



Russ Miles

Grant Tarrant-Fisher
Sylvain Hellegouarch

www.leanpub.com/antifragilesoftware



Get Involved!

Thanks for your time!

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