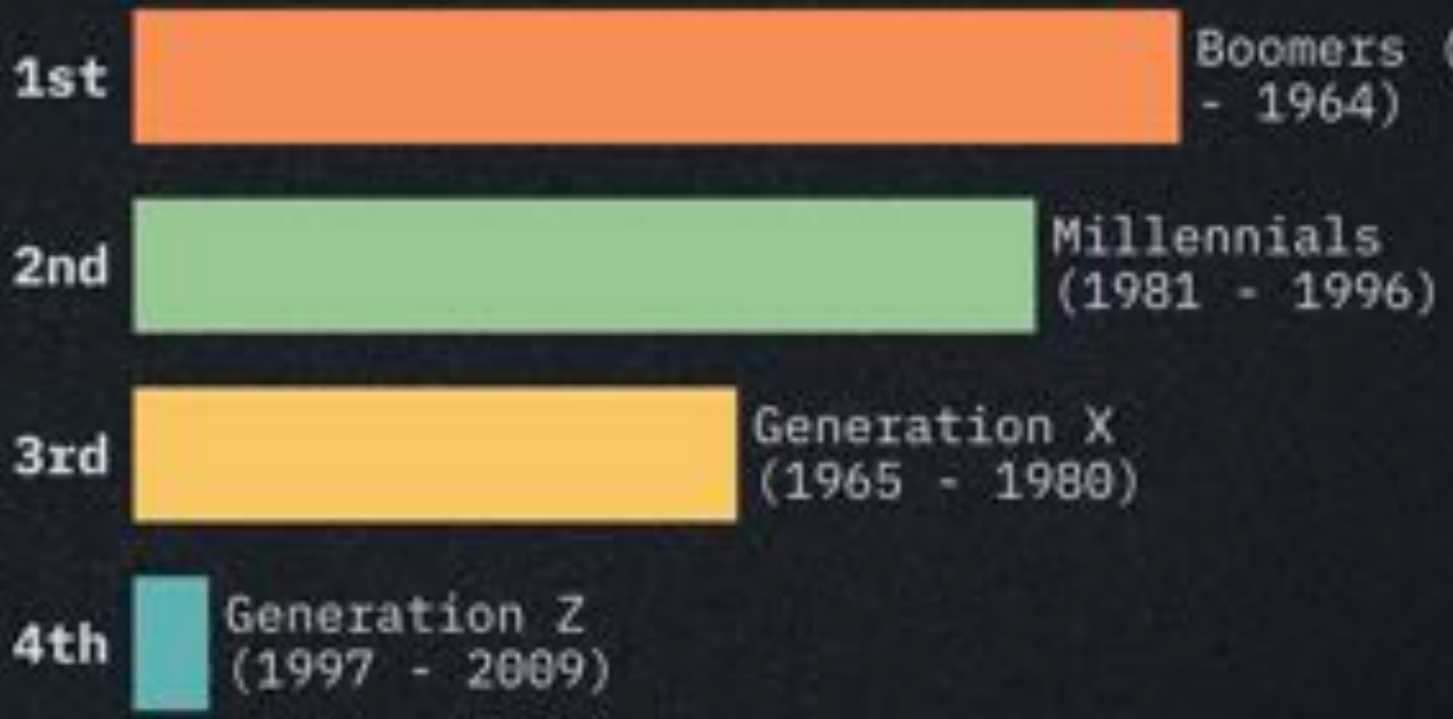
# Guns, lots of guns

## ...there is no silver bullet

— a quest for perspective

# Generation cohorts

Mentimeter



# Generation Z

## The Zoomers

Malte Poegen
Mikkel Noe Nygaard
Luxshan Ratnaravi
Nigel Baker
Lars Kruse
Henrik Kniberg
Fellowship of Agile
GOTO Copenhagen 2022
goto;

inc. goto;

**Consultant @ heart;** “I’m here to help”

**Founded and co-founded 6 companies**

**Employed and mentored 100+ of software designers**

**Aided 100+ companies over 2+ decades**

## My Personal Agile

**Continuous Delivery Evangelist**

**Agile stands on the shoulders of lean**

**DevOps stands on the shoulders of Agile**

**Continuous Delivery is a lean concept**

*If software is eating the world,*
*we should answer back, fight it with it’s own weapons*
*— Software*

Shall I describe it to you?
Or would you like me
to find you a box?
What's happening
out there?

# *The Tar Pit*

**Fred Brooks - The Mythical Man-month 1975**

***The problem of software engineering is a sticky one. Even the strongest among beasts can not escape. It's like a tar pit. Eventually they sink.***

# *The Tar Pit*

**Fred Brooks - The Mythical Man-month 1975**

## Brooks law:

*”Adding manpower to a late software project makes it later”*

## The Surgical team:

Let the good developers program, let the other ones aid them to go faster

## Plan to throw one away:

Exploration doesn’t produce high quality.  The pilot is a throw-away

# Conways' Law

1968

*"Organizations that design systems (in broad sense) are constrained to produce designs which are copies of the communication structures of these organization"*

*Mel Conway, the conclusion in his paper "How do committees invent" - 1968*
*Presented as "Conway's Law" by Fred Brooks in "The mythical man-month" 1975*

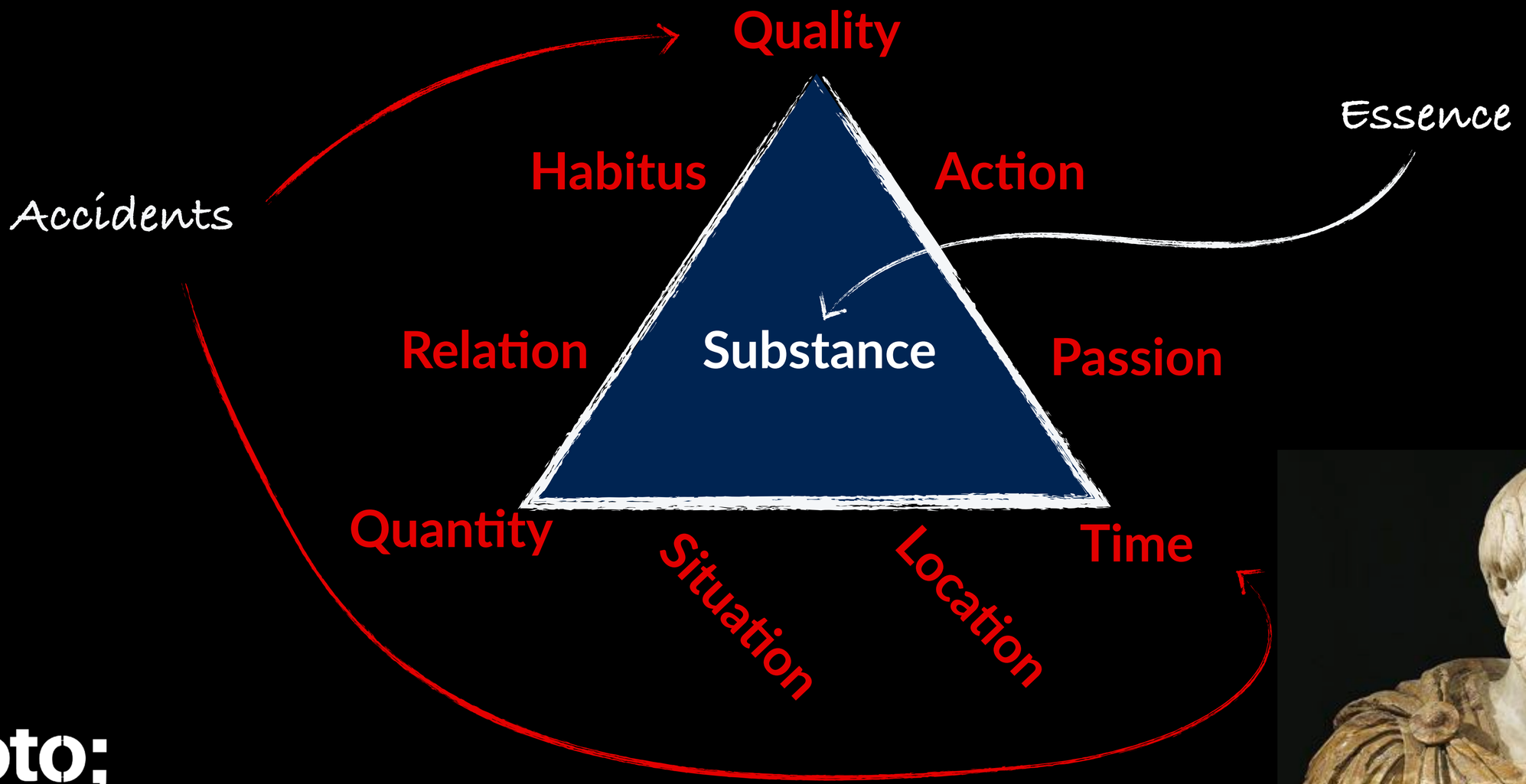
# No Silver Bullet

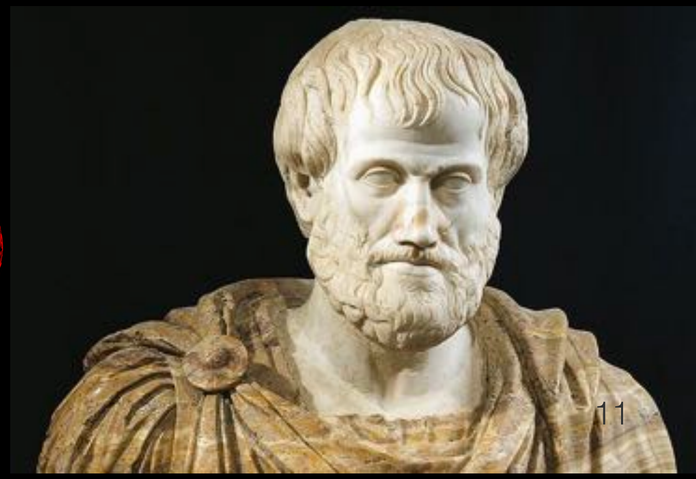
**Fred Brooks - Essence and Accident in Software Engineering - 1986**

*There is no single development, in either technology or management technique, which by itself promises even one order-of-manitude improvement within a decade in productivty, in reliability, in simplicity*

# No Silver Bullet

## Fred Brooks - Essence and Accident in Software Engineering - 1986



# *No Silver Bullet*

**Fred Brooks - Essence and Accident in Software Engineering - 1986**

**Complexity is in the essence,**
not in the accidents

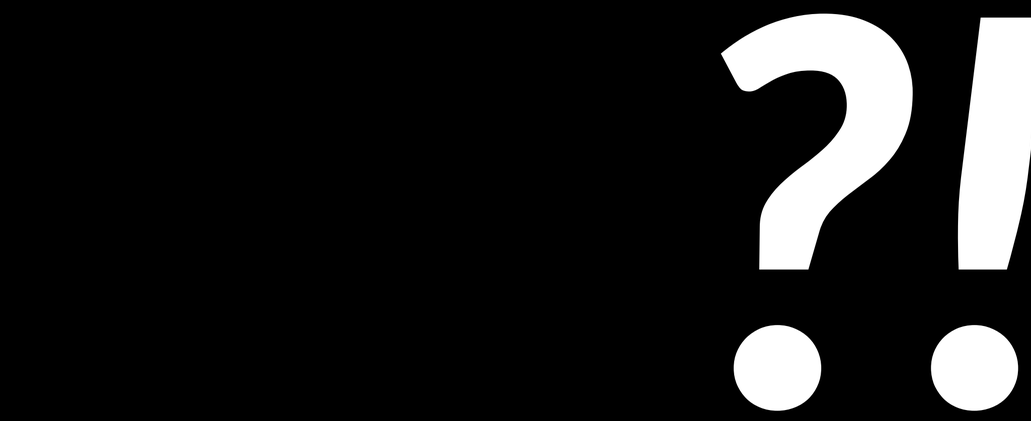
**Stop using construction metaphors**
to depict software — software isn't built

**Like complexity in nature**
it's grown! Software is a creative process

**Hopes for the silver?**
Stop writing code, start reusing code

# Did Agile Improve Software

## With even a one order of magnitude



# *“Why software is eating the world”*

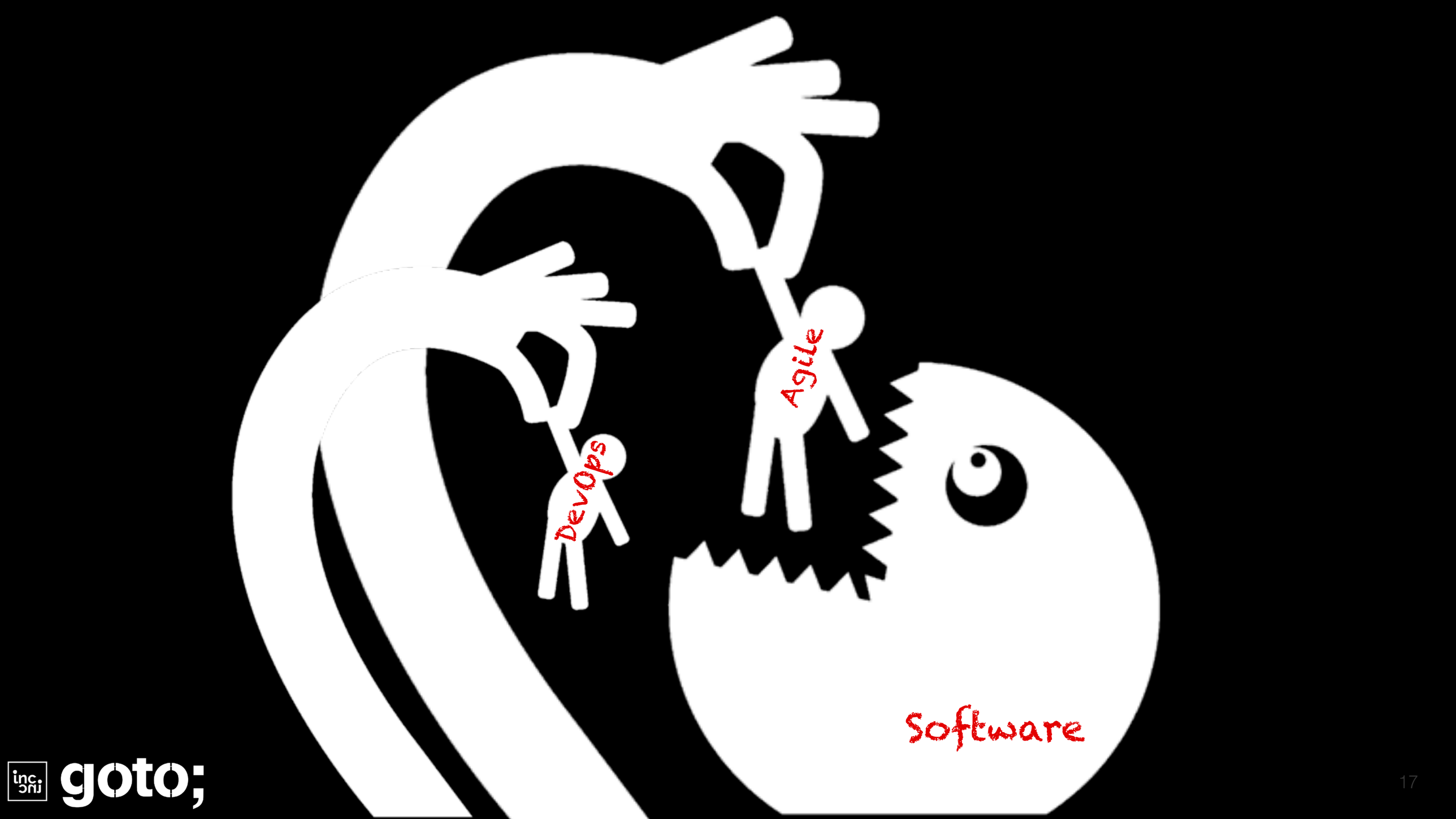
*Marc Andresen, Wall Street Journal 2011*

# How many developers?

## Wordwide in 2022

Estimated ≈25 million professionals

*The next 18 months, the world will produce as much software, as we have done for the past 40 years*


DevOps
Agile
Software

# Guns, lots of guns

## ...there is no silver bullet

— a quest for perspective

Prologue

1. How Did We Get Here?

2. Well — I Know How I Got Here!

3. What To Do About It?

## SaaS Product Development

~~Startup product~~

~~Startup product~~

“Fail Cheap” Product Lab

Citizen Development

kea

COPENHAGEN SCHOOL OF DESIGN AND TECHNOLOGY

## SaaS Product Development

30 ECTS (full semester)

Interdiscipinary skills

..in teams of 6

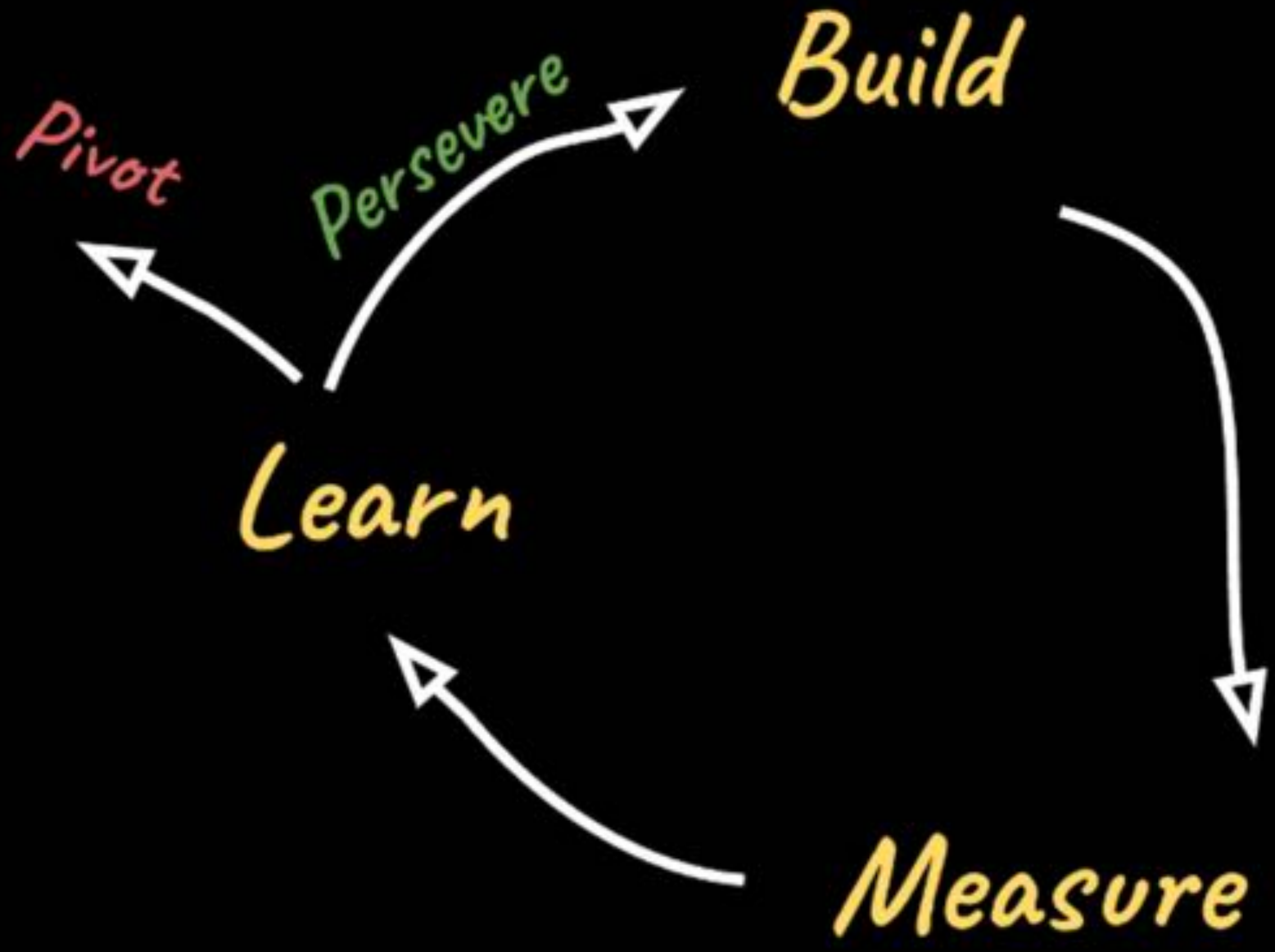
Creating a real SaaS product, based on somone’s real need

...in 20 weeks

# Lakruzz' law

Any organization that sets off on a certain toolstack (processes included) will remain on that stack until eternity or end-of-life whichever comes first

*Lars Kruse, Lakruzz' Law 2022*
*www.inc-inc.dk/stories/lakruzz-law*

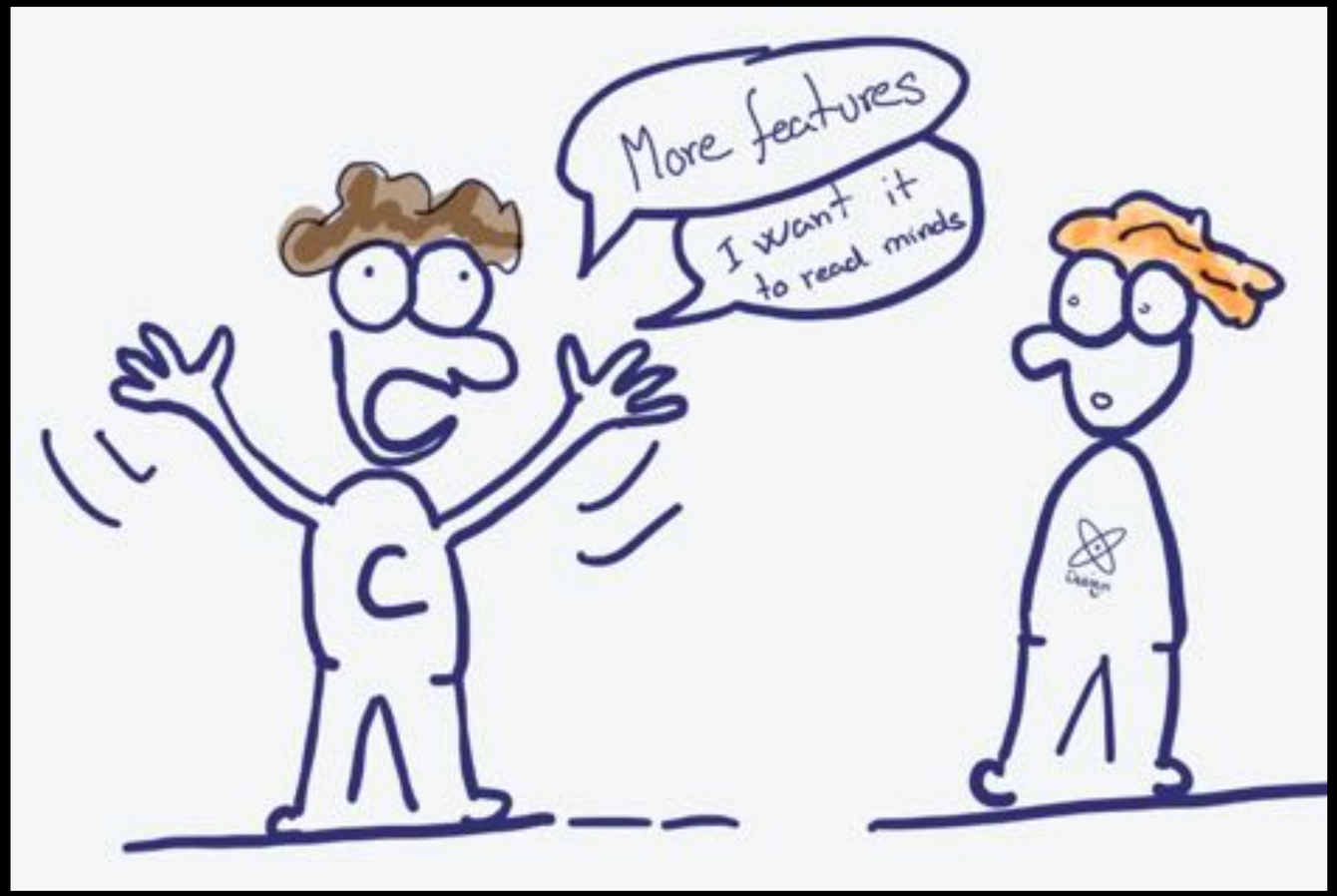



*Lars Kruse, Leap of Faith Assumptions*
*www.linkedin.com/pulse/leap-faith-assumptions-lars-kruse/*

# DevOps for Startups

## 10 tips Agile and DevOps - to make startups delicious

1. Build the right team
2. Automate everything
3. Test in production
4. Make it scale
5. Pick the right tool stack
6. Listen to the customer
7. Be data-driven
8. Easy onboarding of users
9. Easy onboarding of developers
10. Be design-led (…not design-fed)




*Get the free book at:*
*www.inc-inc.dk/stories/devopsforstartups*

# Aesthetics

## Software Must Become Delicious

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# DevX

## Software Must Become Delicious

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**The next big challenge in software is Aesthetics. We must invite anybody who can contribute to the aesthetics of software products into the dev teams, as 1st class citizens.**

*Business developers, AI experts, Market analysts, Marketeers, Graphical designers, UX designers, Security experts, Community builders, Content writers, Citizen Developers, Data Scientist, Facilitators ...everyone — X — are all equally important contributors to modern software — as well as Dev's and Ops.*

DevOps
DevX

inc. goto;

# DevX

## SaaS Community of Practice

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Join group on LinkedIn: bit.ly/devx-linkedin
Follow or connect to Lars LinkedIn: @lakruzz

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# Generation Z

## The Zoomers