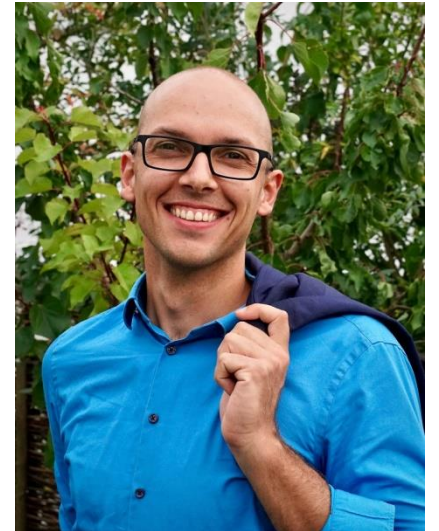


DevAct – Why Actuaries should become Developers

Jonas Offtermatt, Postbeamtenkrankenkasse

About the speaker

- Jonas Offtermatt– *Business Unit Manager, Postbeamtenkrankenkasse*
 - *PhD in Mathematics*
 - *Afterwards Software Developer*
 - *Actuary*
- *Postbeamtenkrankenkasse*, very special german run-off health insurer, only for german post office clerks

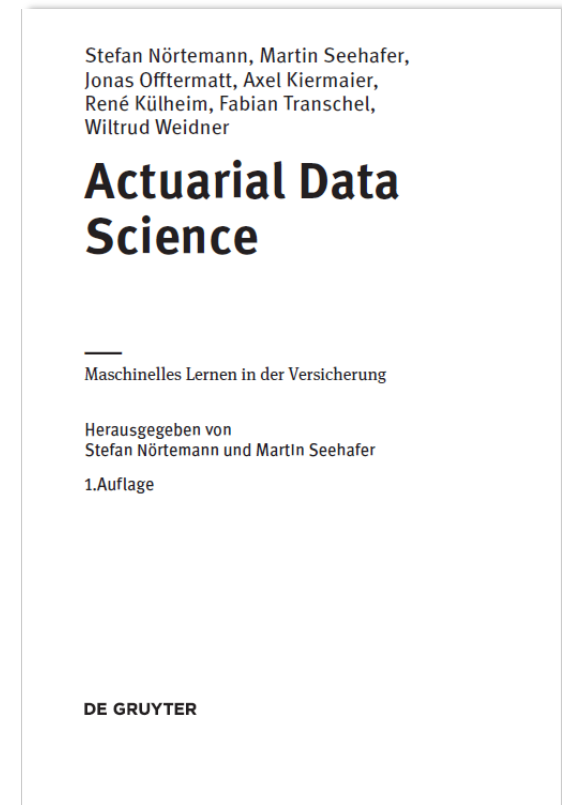


PBeaKK
Gesund versichert.

Thank you

Many thanks to:

- Martin Seehafer, MunichRe
- Martin Genz, ifa Ulm



Agenda

1. What?

- Introduction to DevOps

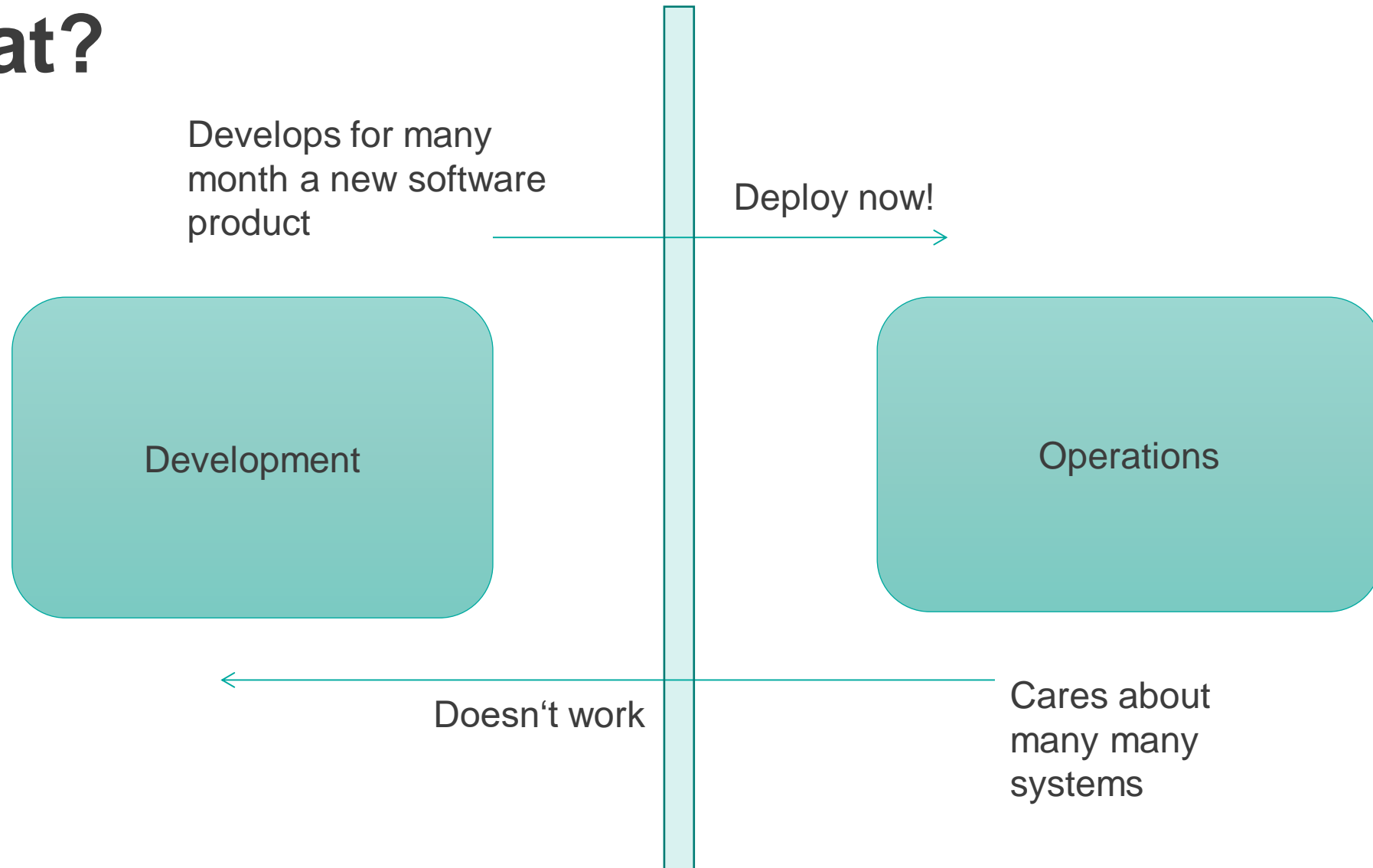
2. Why?

- Actual Challenges of Actuaries

3. How?

- From DevOps to DevActs

What?

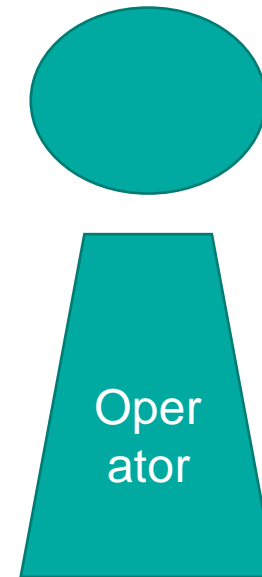


Developer vs Operator



Characteristics:
Developer:

- Brilliant genius
- Hacks his way
- „Of course there is a simpler solution, but this one is more brilliant.“

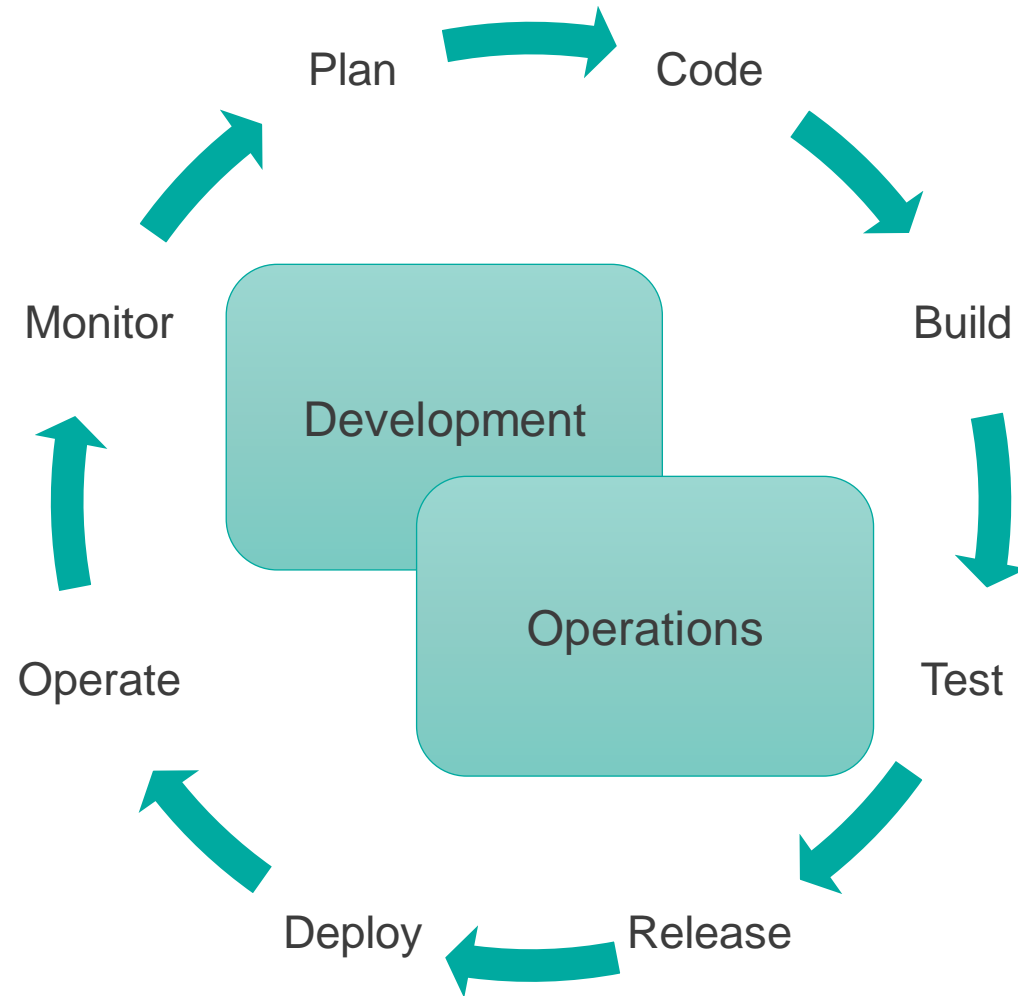


Characteristics: Operator:

- Stable Blue Collar Worker
- Sticks to routines
- „I’ve done this hundred times before and i will do it the same way the next hundred times.“

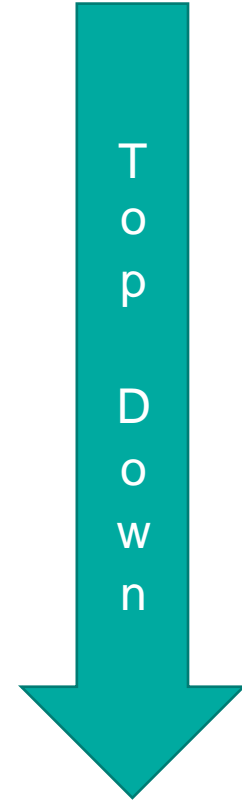
DevOps Cycle

- Release more often
- Test before every run
- ..



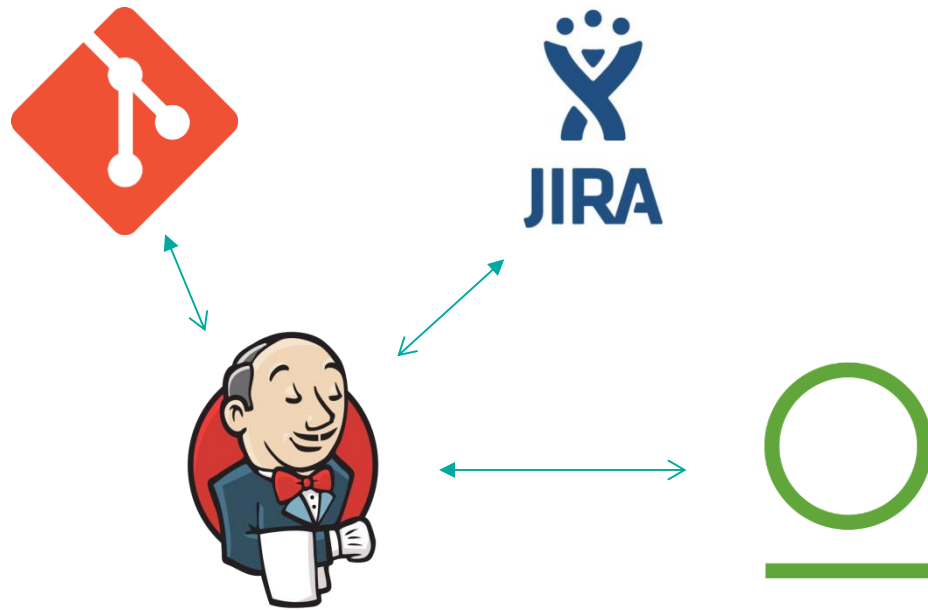
C.A.L.M.S - Culture

- Trust
- Listen to another
- Do things together
- Open minded
- Willingness to learn



C.A.L.M.S - Automation

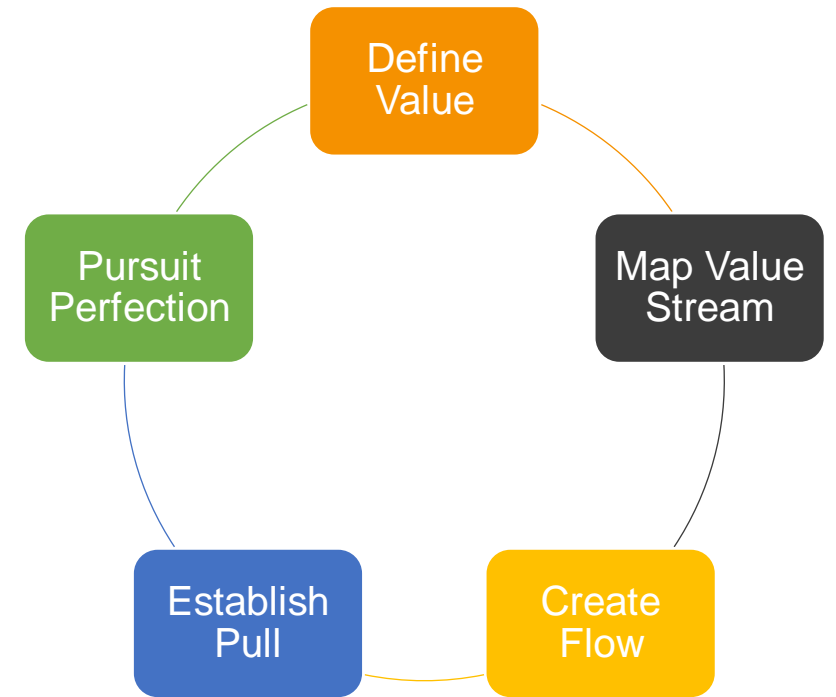
- Continuous Development
- Continuous Integration



Never send a human
to do a machines job

C.A.L.M.S - Lean

- Remove waste
- Make everything as simple as possible
- Remove bottlenecks



Focus on delivering value to your customers

C.A.L.M.S - Measure

KPIs to measure:

- MTTR (Mean Time To Recover/Restore)
- Change Fail rate
- % of Failed / Successful deployments
- Time in cycle



Measure everything and use the data to refine cycles

C.A.L.M.S - Share

- If you visit a customer, prospect, analyst, conference, then you have an obligation to share your findings with everyone.
- If you investigate a new technology, then share your findings.
- If you answer a support query, don't just provide the answer, go further and explain how you came to your conclusion



DevOps - Skills

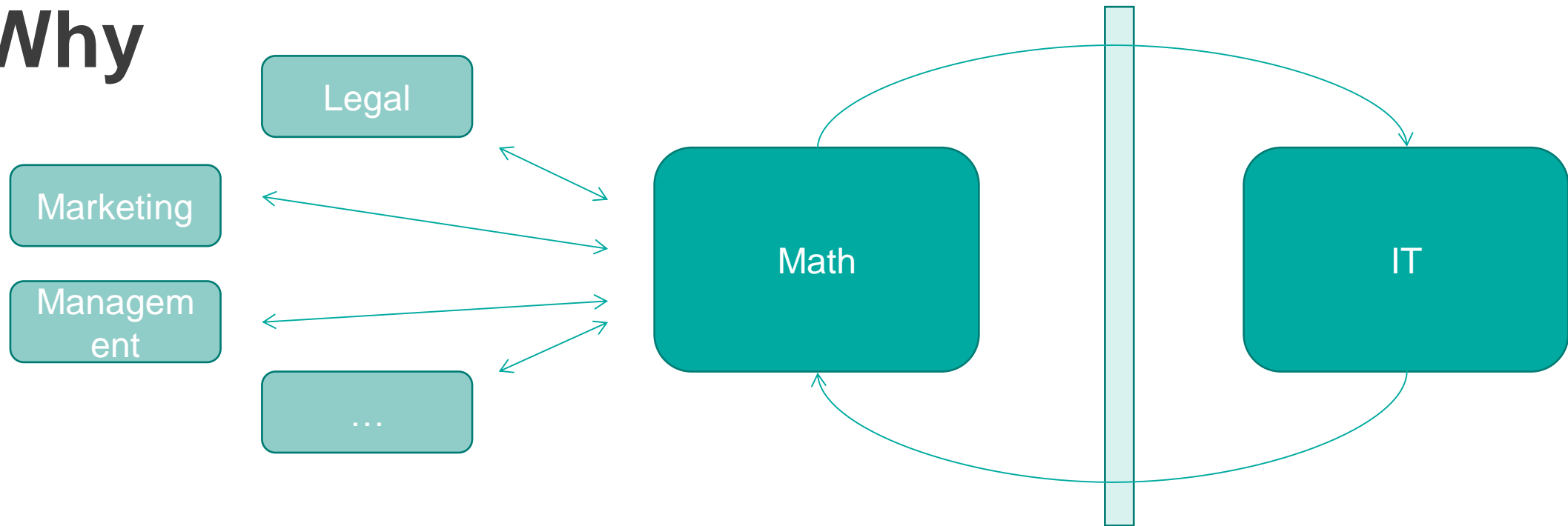


Brilliant genius, who automates everything, has an understanding of development and operations and is willing to learn from both worlds.



Keep
C.A.L.M.S.
And
DevOps
on!

Why



- perpetually requests from management
- a lot of manual updates
- product cycles > 1 year
 - For all this challenges actuaries need IT.

Mindset



Charateristica: Developer:

- Brilliant genius
- Hacks his way
- „Of course there is a simpler solution, but this one is more brilliant.“



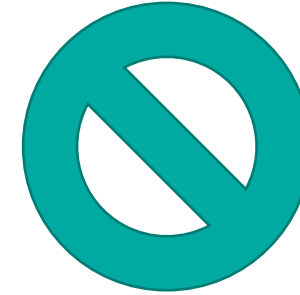
Charateristica: Actuary:

- Brilliant Mathematician
- Searches the perfect solution
- „I know, the machine can do this, but i rather calculate by hand/excel.“

C.A.L.M.S - Automation



- Python and / or R
- Source Code Management

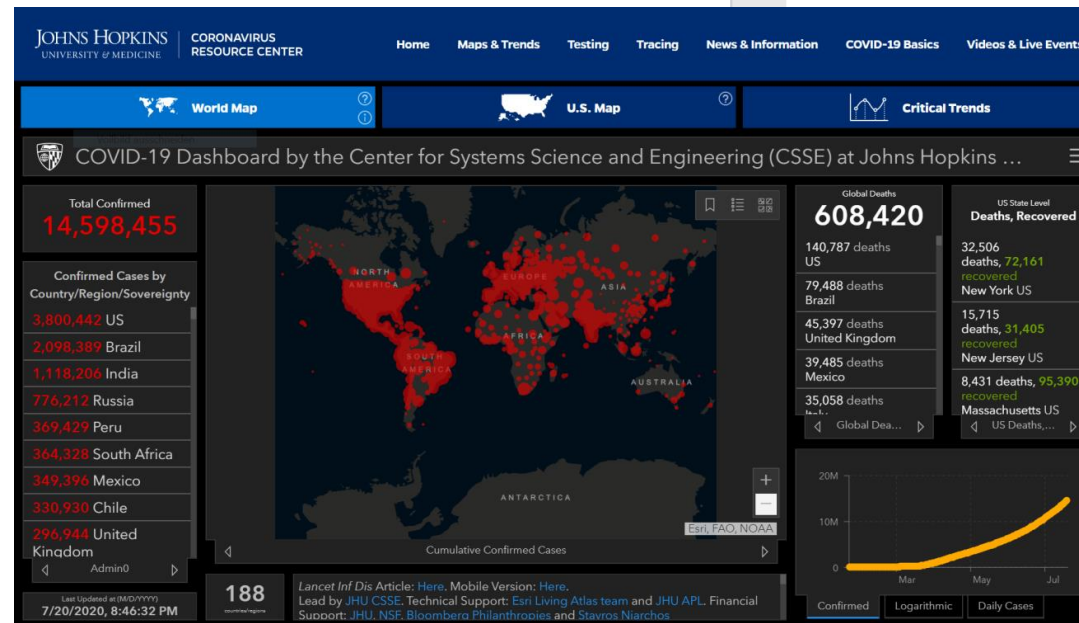
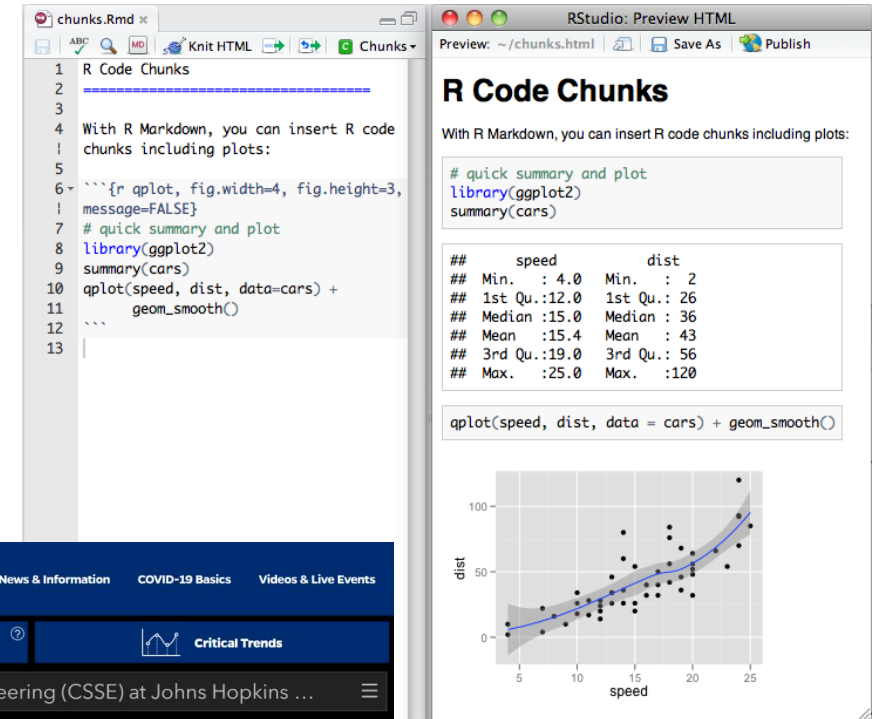


- Excel and / or VBA
- File Manager



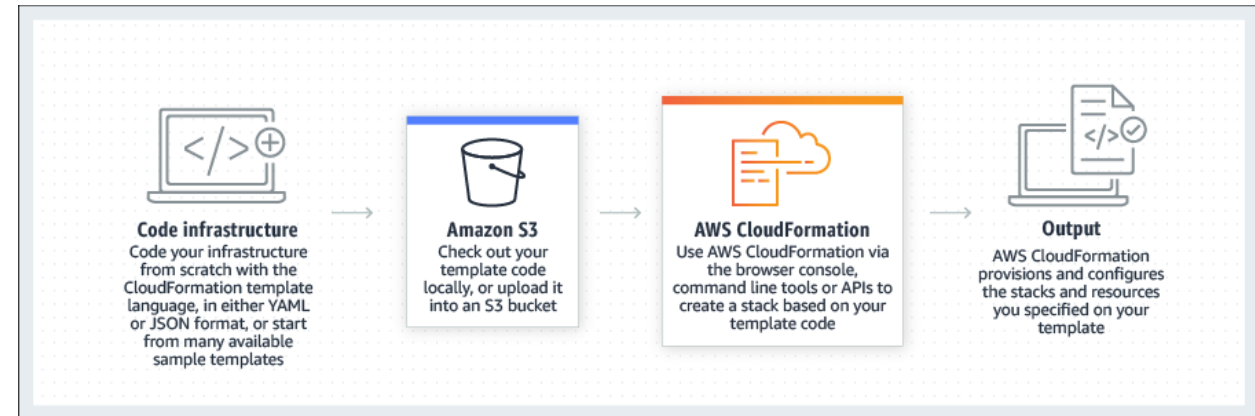
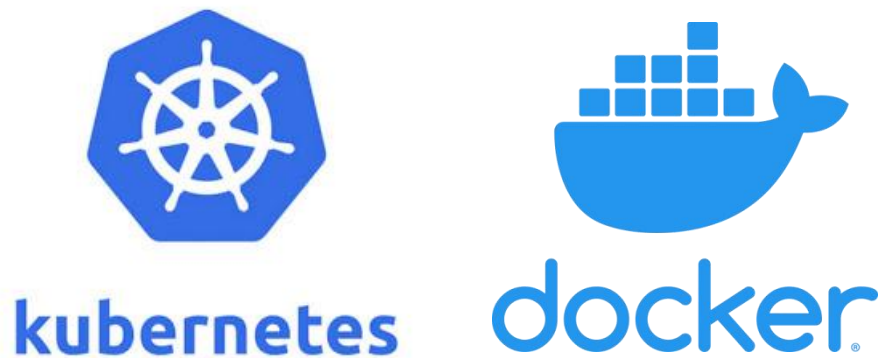
C.A.L.M.S - Automation

- Start using KNITR
- Automate your Workflows
- Build interactive Dashboards



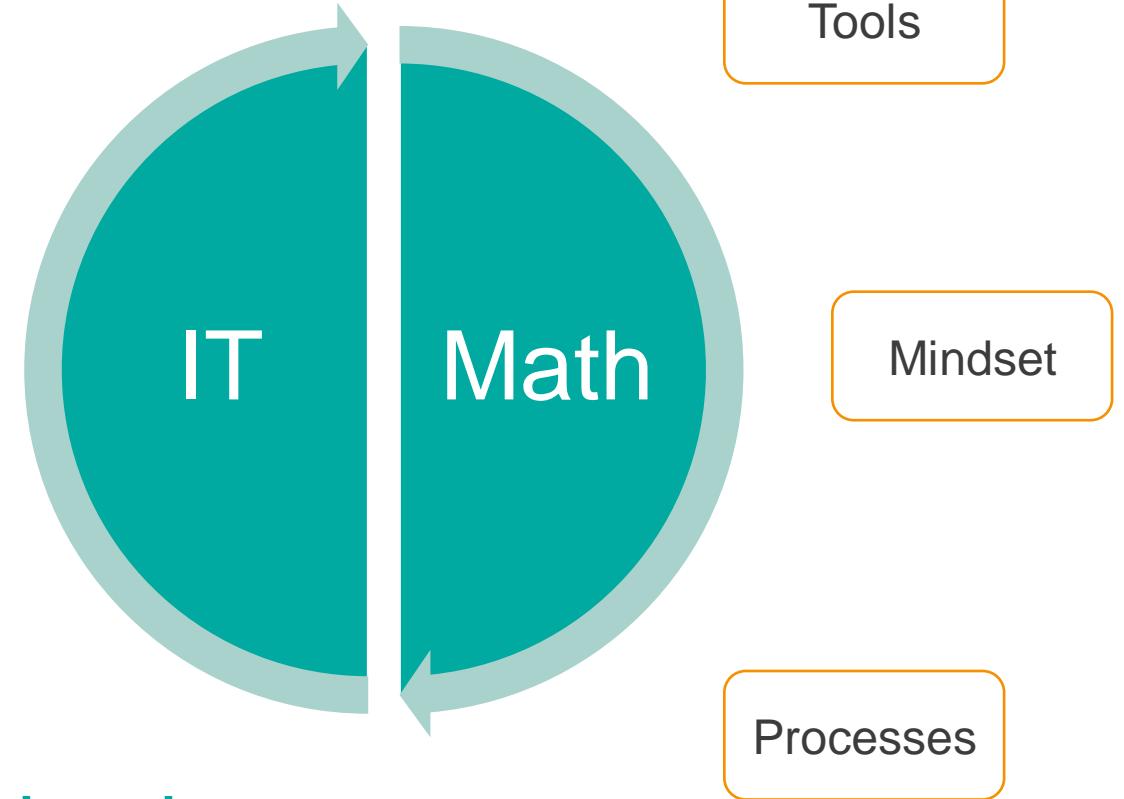
C.A.L.M.S - Automation

- Start using the cloud with infrastructure as a code
 - Write some code instead of negotiation with IT.



C.A.L.M.S – Culture + Lean + Sharing

- Get in constant feedback loops with your IT
- Learn from your IT
- Use the tools of your IT



Trust your IT and listen to each other

The DevAct



Brilliant
mathematician, who
automates
everything using
existing tools, has an
understanding of
programming and is
willing to learn

Just in case ...

- You still didn't get the message:
- I think actuaries should become:

https://www.youtube.com/watch?v=Vhh_GeBPOhs

Thank you very much for your attention!



contact details

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