

# DevOps @ Swiss Post Parcel Sorting

# Agenda

## Introduction

1. Swiss Post
2. Case «Weiterentwicklung Sortierung»
3. What is DevOps and why DevOps?

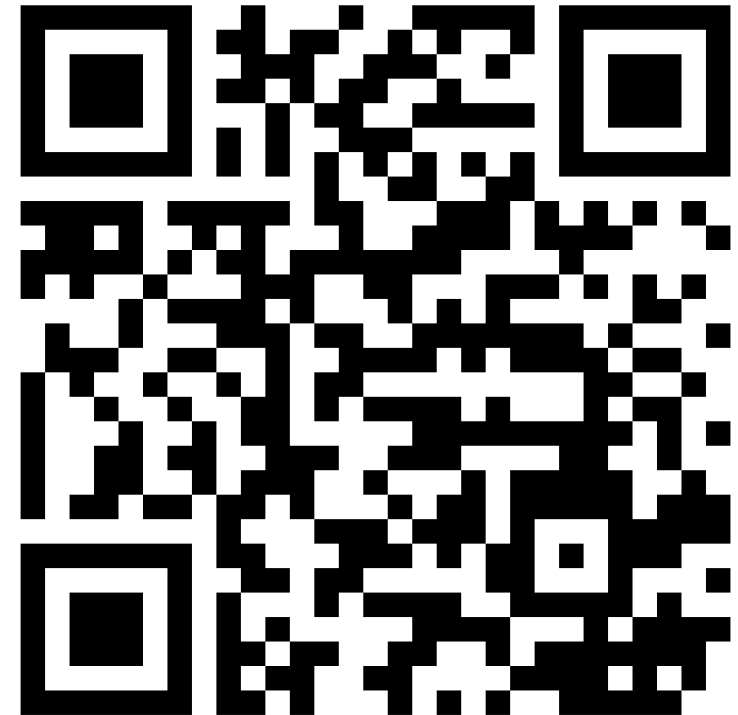
## Our Journey

4. Methodology
5. Success
6. Failures
7. Challenges

## Closing

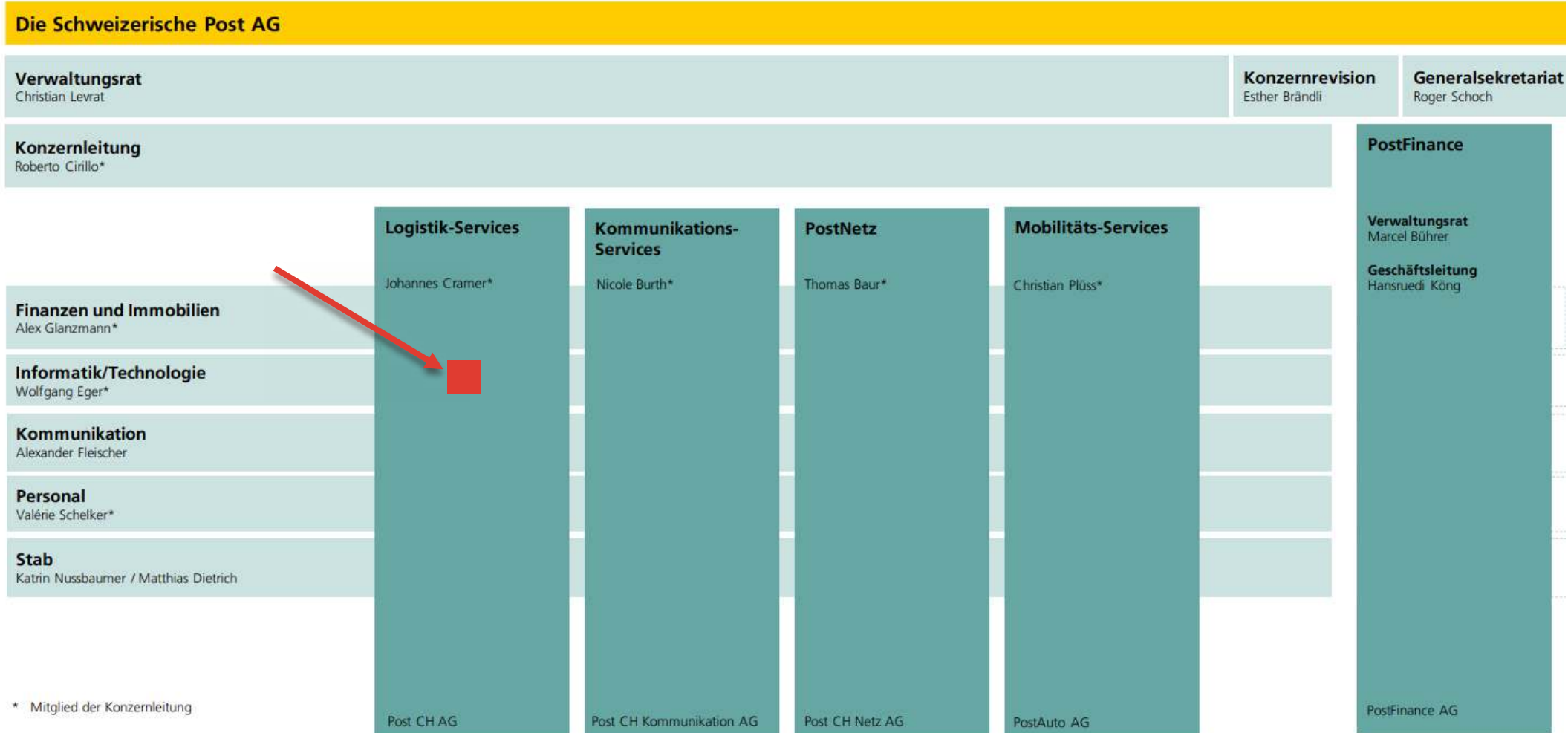
8. Conclusion

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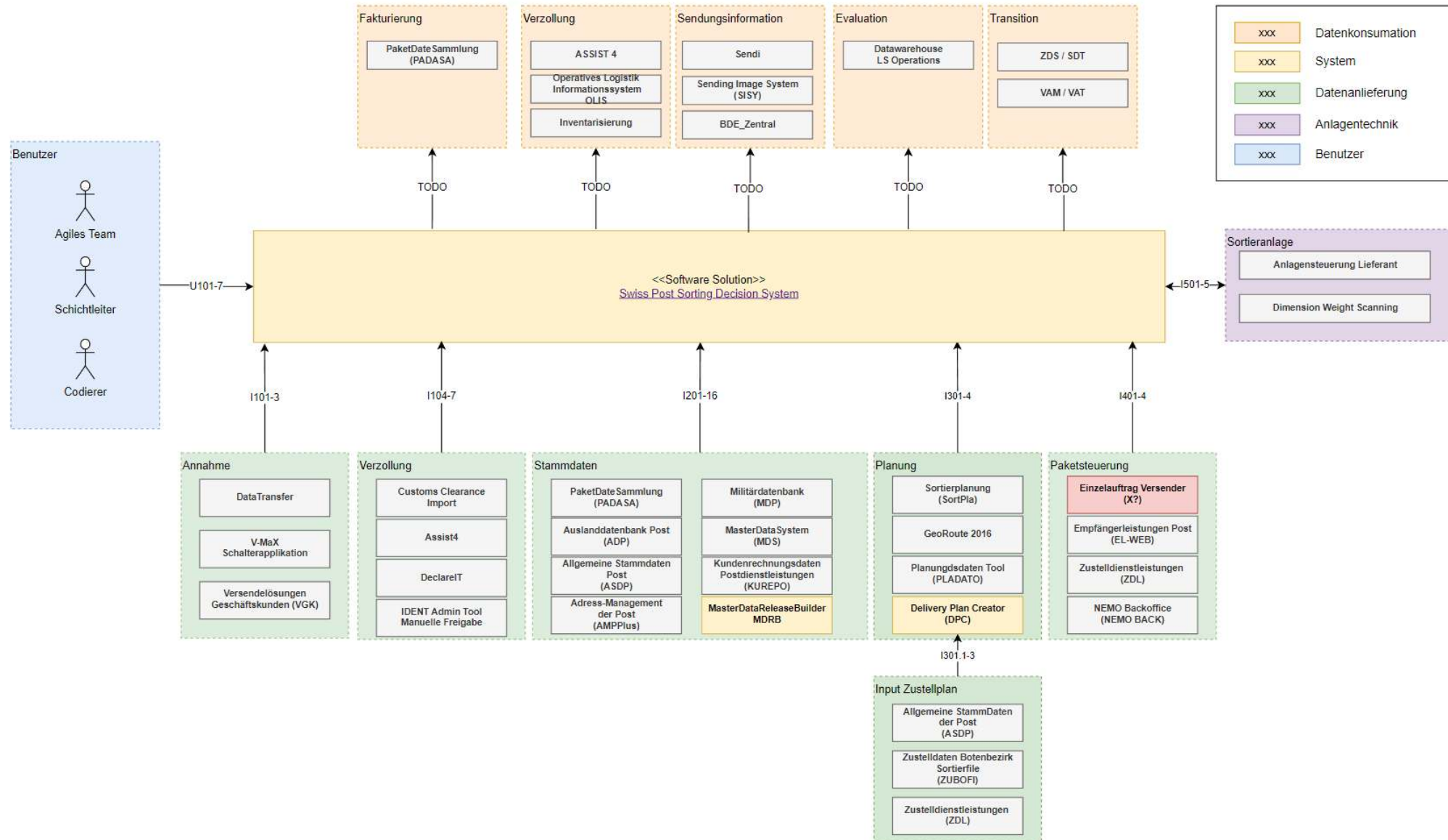
# Swiss Post



# Case “Weiterentwicklung Sortierarchitektur”



# Case "Weiterentwicklung Sortierarchitektur"



# Why DevOps?

## Elite performers

Comparing the elite group against the low performers, we find that elite performers have...

973x

more frequent  
code deployments

6570x

faster lead time  
from commit to deploy

Yes, you read  
correctly.  
This is not an  
editorial error.

3x

lower change failure rate  
(changes are  $\frac{1}{3}$  less likely to fail)

6570x

faster time to recover  
from incidents

[2]

# What is DevOps?!

[3]

## Premises:

Dev's job is to add new features!

Ops' job is to keep the site stable and fast!

Business requires change.

## Conclusion:

Lowering frequency of changes.

## Premises:

Dev's job is to enable the business.

Ops' job is to enable the business.

Business requires change.

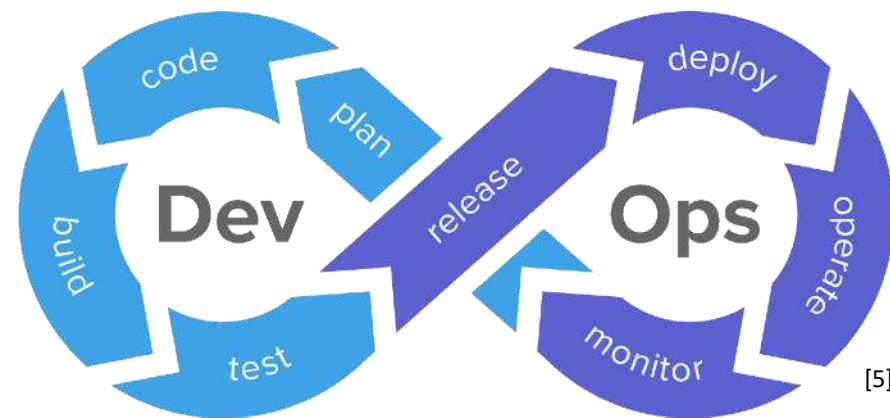
## Conclusion:

Lowering risk of change through tools and culture.

# DevOps

Lowering risk of change through tools and culture.

“a **set of practices** intended to **reduce the time** between committing a change to a system and the change being **placed into normal production**, while **ensuring high quality**” [4]





# Methodology

## Organizational

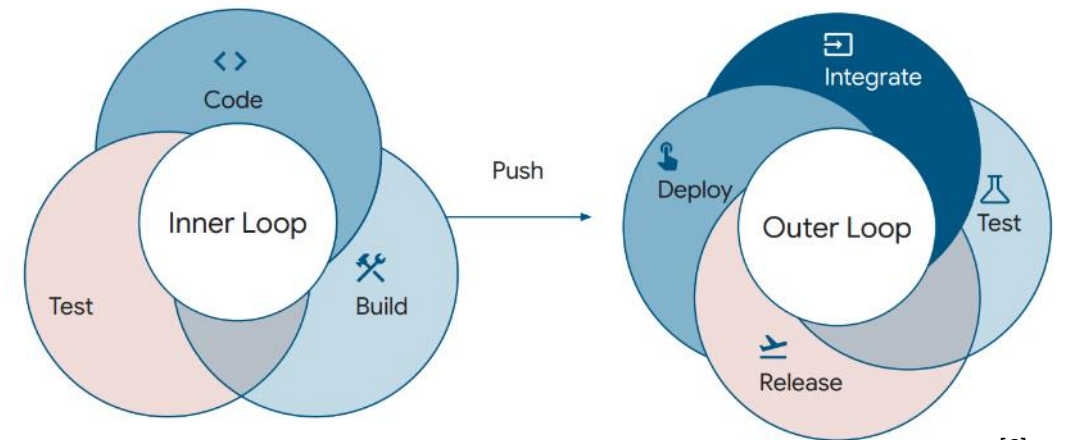
- Establish a vision & raise the bar
- Hire smart and well educated people
- Establish Culture of Excellence & Improvement

## Technical Foundation

- Establish Software Engineering Practices (DORA)
- Implement Cross-Cutting-Concerns & connect Platforms
- Constantly optimize Inner & Outer Loop

## Principles

- Build Quality In
- Work in Small Batches
- When it Hurts, do it more often
- Automate all the things
- Shift left



[6]

# Success

20

Deployments

~3d

Lead Time

<1/%

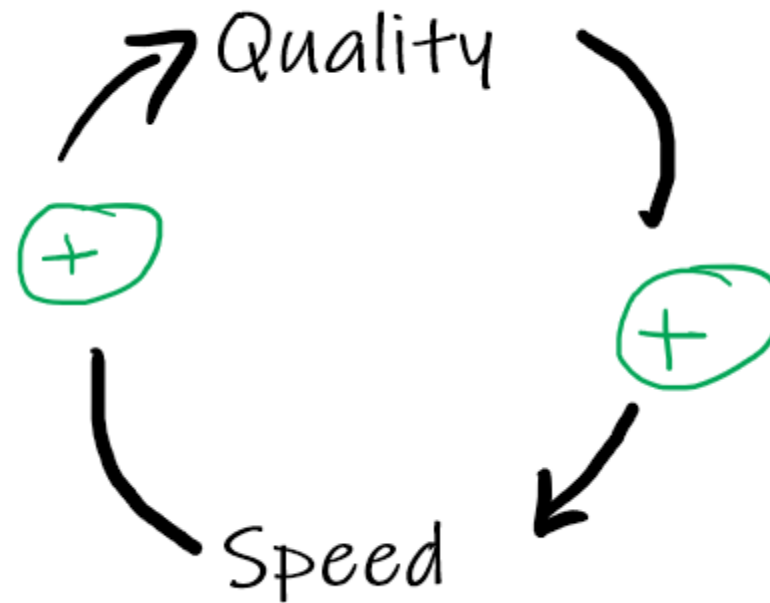
Change Failure Rate

<1h

Time to Restore

## Most important thing – “the tradable quality hypothesis”

*It's vital to focus on the true value of internal quality - that it's the enabler to speed. **The purpose of internal quality is to go faster.** – M. Fowler, 2011 [7]*



# Failure

- We were not able to establish a «share» culture outside of our team
- We flew under the radar so far, nothing was officially approved
- We have no «deployment view» which resists organizational change
- We still have to fight, to enable teams to make technical decisions

# Challenges

## Swiss Post and Project

1. Missing Senior Personell to continue the journey
2. Dunning–Kruger effect «Every Body is an Architect» & «Management Interventions»
3. Platform Maturity
4. Missing trust within the organization

## For the industry

1. Doing the things the same way, with new structures and new tools
2. Not overcome the intuition to reduce an activity, if it hurts
3. Missing Development Skills

# Conclusion

DevOps is nothing more than creating software the right way but

- In Small Batches
- With End-2-End Responsibility

# References

1. [https://www.post.ch/-/media/post/ueber-uns/dokumente/konzernstruktur.pdf?vs=42&sc\\_lang=de&hash=39B0198D42D55E45AB5FED9F9B49EEE4](https://www.post.ch/-/media/post/ueber-uns/dokumente/konzernstruktur.pdf?vs=42&sc_lang=de&hash=39B0198D42D55E45AB5FED9F9B49EEE4) (08.10.2022)
2. Smith, D., Villaba, D., Irvine, M., Stanke, D., & Harvey, N. (2021). *Accelerate State of DevOps 2021*. <https://cloud.google.com/blog/products/devops-sre/announcing-dora-2021-accelerate-state-of-devops-report>
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4. Bass, L., Weber, I., & Zhu, L. (2015). *DevOps: A Software Architect's Perspective* (1st ed.). Addison-Wesley Professional.
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7. <https://martinfowler.com/bliki/TradableQualityHypothesis.html> (08.10.2022)