

# Mob-Programming

## – Team-Building inklusive!

Track „IT Organisation“

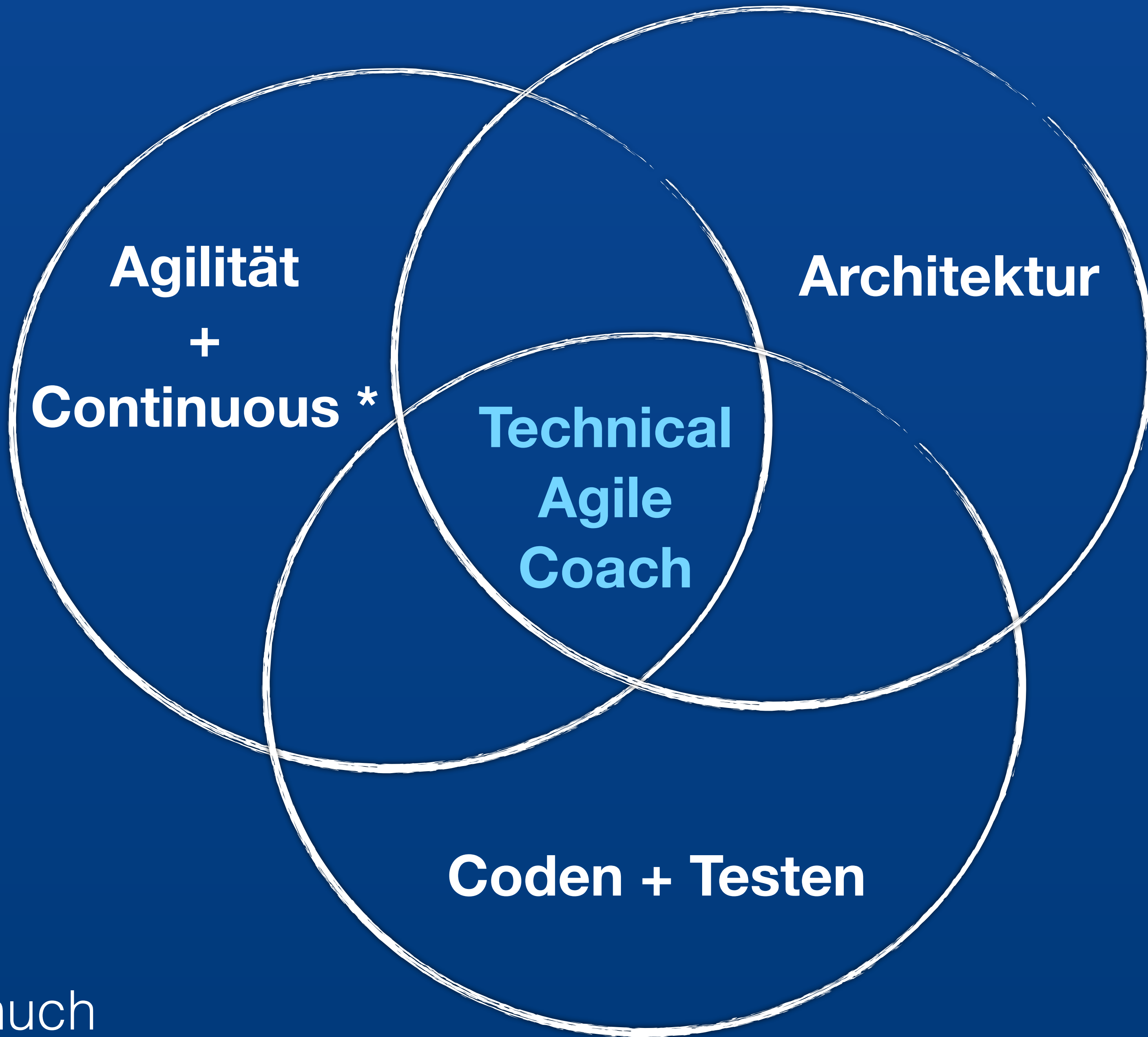
Thomas Much

 @thmuch

16. September 2022



[www.tk.de/IT](http://www.tk.de/IT)



 @thmuch





Was ist ein Team?



A dramatic landscape featuring a large, bright sun on the left side, partially obscured by clouds. In the center, two silhouetted figures stand on the edge of a grassy cliff, their arms raised in a celebratory gesture. The foreground is filled with tall, golden-brown grasses. The background shows a vast valley with rolling hills and mountains under a cloudy sky.

Was ist ein Team?

**gemeinsames Ziel**



The image shows five people in silhouette, captured in various dynamic poses of running and jumping. They are positioned on a large, curved, metallic structure that resembles a giant slide or a tunnel. The background features a calm body of water, distant hills, and a sky with soft, warm light from a setting or rising sun. The overall mood is energetic and joyful.

Was ist ein Team?

**gemeinsam Spaß**



Was ist ein Team?





**Die anderen kennenlernen verstehen**

**„Wie ticken die?“ Interessen & Hobbys**

**Team-Building**

**„Was für Menschen sind das?“**

**Humor**

**„Wie gehen sie an Probleme heran?“**



Symbolbild!  
Digitalisierung!



Arbeitsalltag



Team-Building  
im  
Arbeitsalltag



# Mob Programming

A Whole Team Approach



By Woody Zuill and Kevin Meadows



# The Mob Programming Guidebook



# MOB PROGRAMMING GUIDEBOOK

MAARET PYHÄJÄRVI

# Technical Agile Coaching with the Samman method

By Emily Bache  
Foreword by Kent Beck



vi & Llewellyn Falco

Jochen Christ  
Simon Harrer  
Martin Huber

# Remote Mob Programming

At home, but not alone

INNOQ

Foreword by Mark Pearl

The Pragmatic Programmers

Pragmatic exPress

# Code with the Wisdom of the Crowd

Get Better Together with Mob Programming

Mark Pearl  
edited by  
Tammy Coron





# Mob-Programming

~2011 eher nebenbei entstanden

**Seit 2014 weltweit diskutiert & eingesetzt**

(ältere Ideen hatten sich nicht durchgesetzt)

10+  
Jahre



Woody Zuill

<https://woodyzuill.com/>

<https://twitter.com/woodyzuill>



# Mob-Programming

„Mobbing“ 🤔🤨

Group Programming  
**(Whole) Team Programming**

Ensemble Programming\*

„Mobsen“\*\* 😊



# Mob-Programming

**Alle zusammen.**

(idealerweise 4–6 Personen)

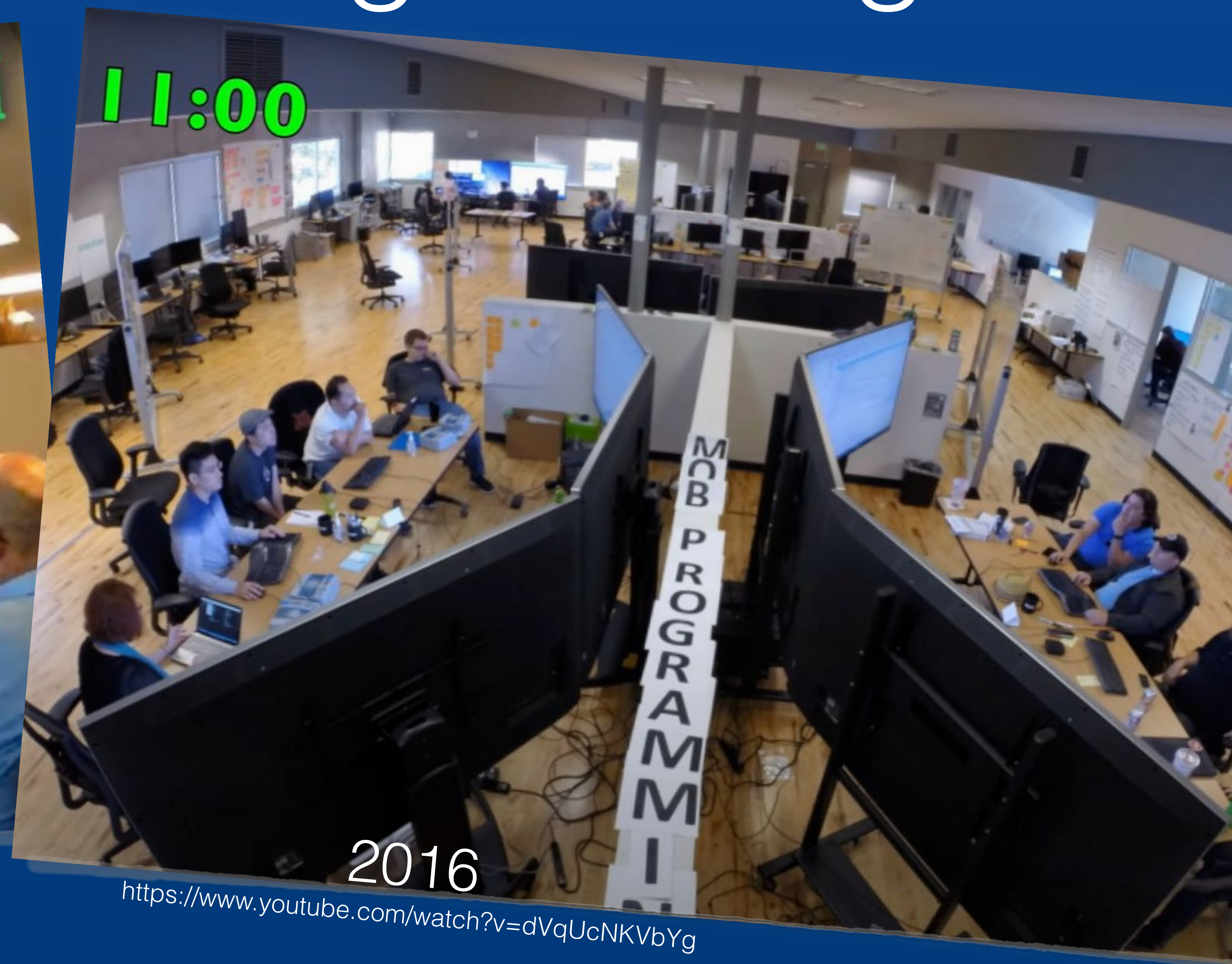
**Eine gemeinsame Aufgabe.**

"**All the brilliant minds** working together on the same thing,  
at the same time, in the same space, and at the same computer."

– Woody Zuill



# A Day of Mob Programming



[https://www.youtube.com/watch?v=p\\_pvsIS4gEI](https://www.youtube.com/watch?v=p_pvsIS4gEI)

<https://www.youtube.com/watch?v=dVqUcNKVbYg>



# Typist & Navigatoren (& Coach)

Code-Commits  
nur hier!



angelehnt an das „Mob Programming Guidebook“



# Mob-Programming üben

## Strong-Style-Navigation

Tastaturwechsel

alle

5-10 Min. / remote 10-15

Feste Timebox

Ein paar Vorschläge  
zum Loslegen –  
erst danach  
experimentieren

“We make a commitment to treat  
each other with **kindness,**  
**consideration** and **respect**”

– Woody Zuill

Sichere Umgebung

Mini-Retro am Ende



# Driver-Observer Anti-Pattern



Worker

Watcher

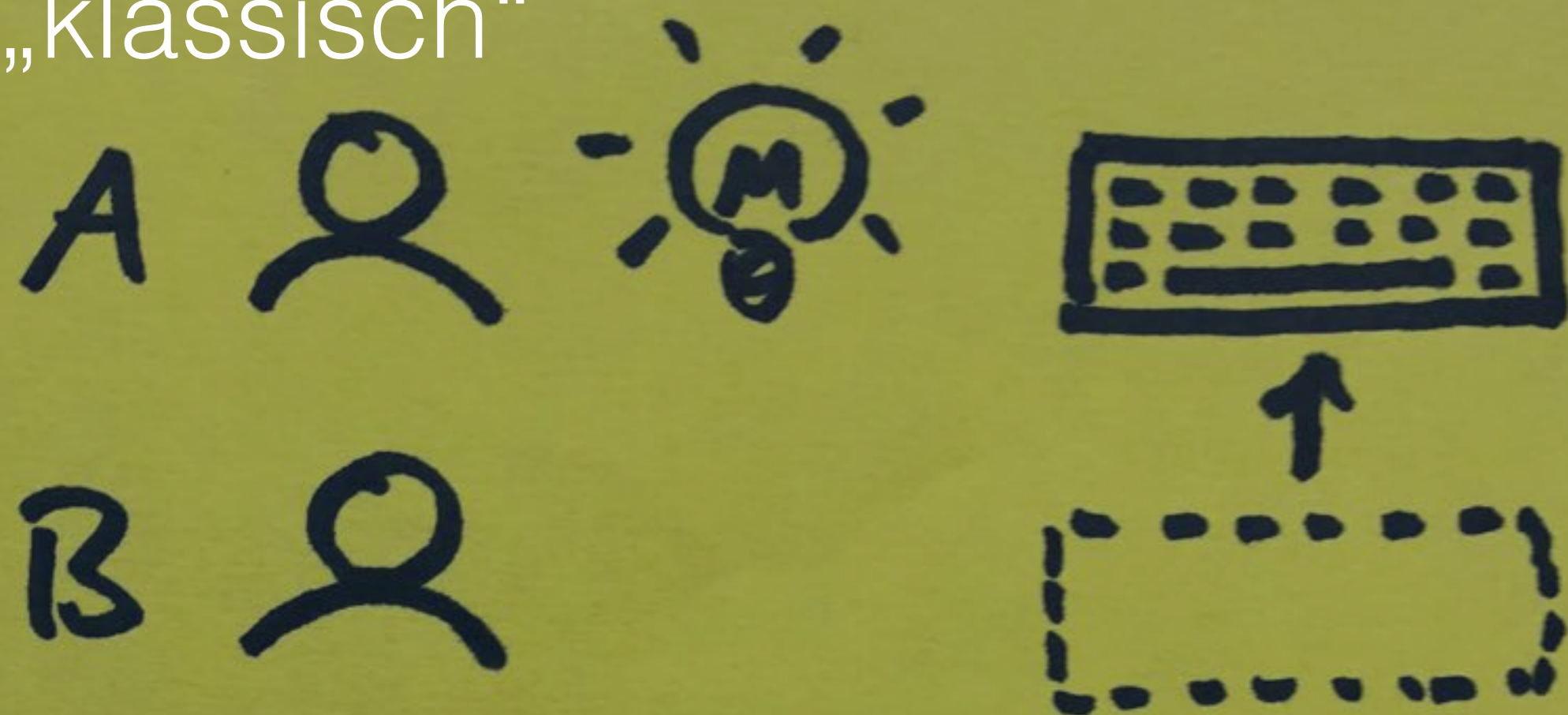


# Strong Style Navigation!

“for an **idea** to go from your head to the computer, it **must go through someone else’s hands**” – Llewellyn Falco

Üblich  
beim  
Mob-Programming

„klassisch“



„Strong Style“





*Mini-Retros*

Das Gute **stärken!**

LIKED

LEARNED

LACKED



*Vor Ort, in Präsenz.*

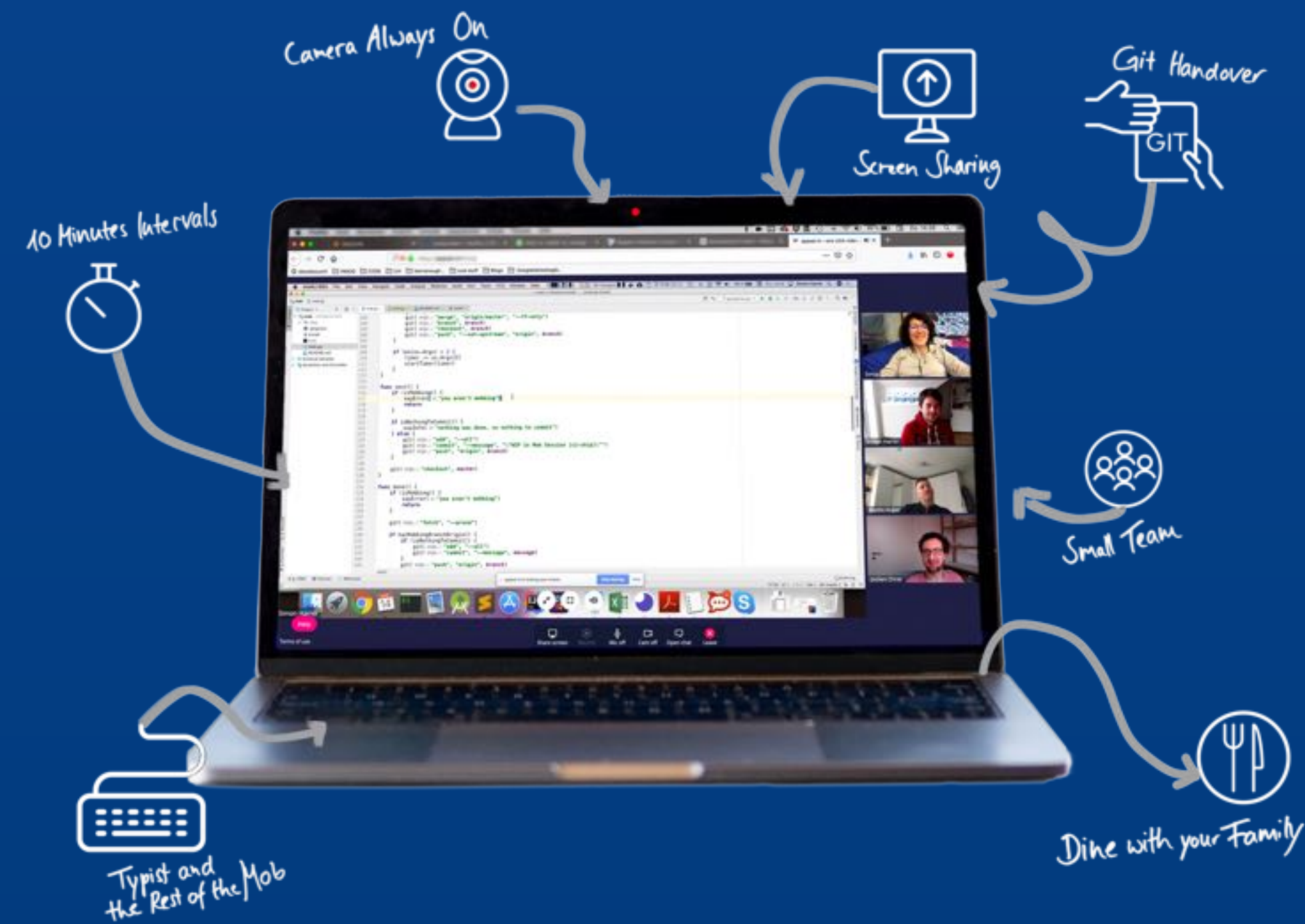
**Remote?**



# Remote Mob Programming

Remote Everybody  
Camera Always On  
Regular On Site Meetings  
Small Team  
Same Time

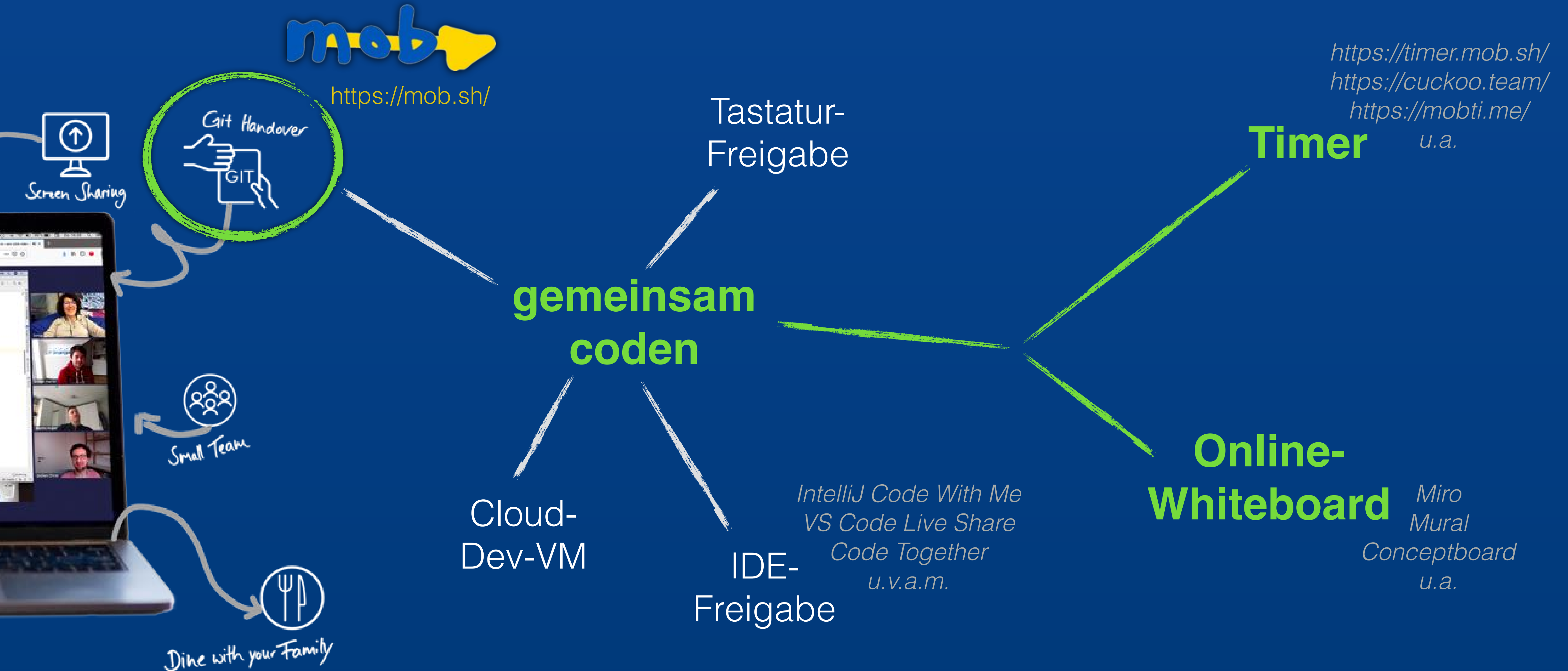
Typist and the Rest of the Mob  
Screen Sharing  
10 Minute Intervals  
Git Handover  
Group Decisions  
Constant Momentum  
Learn from the Team  
Trust  
Save the Planet  
Dine with your Family



<https://www.remotemobprogramming.org>

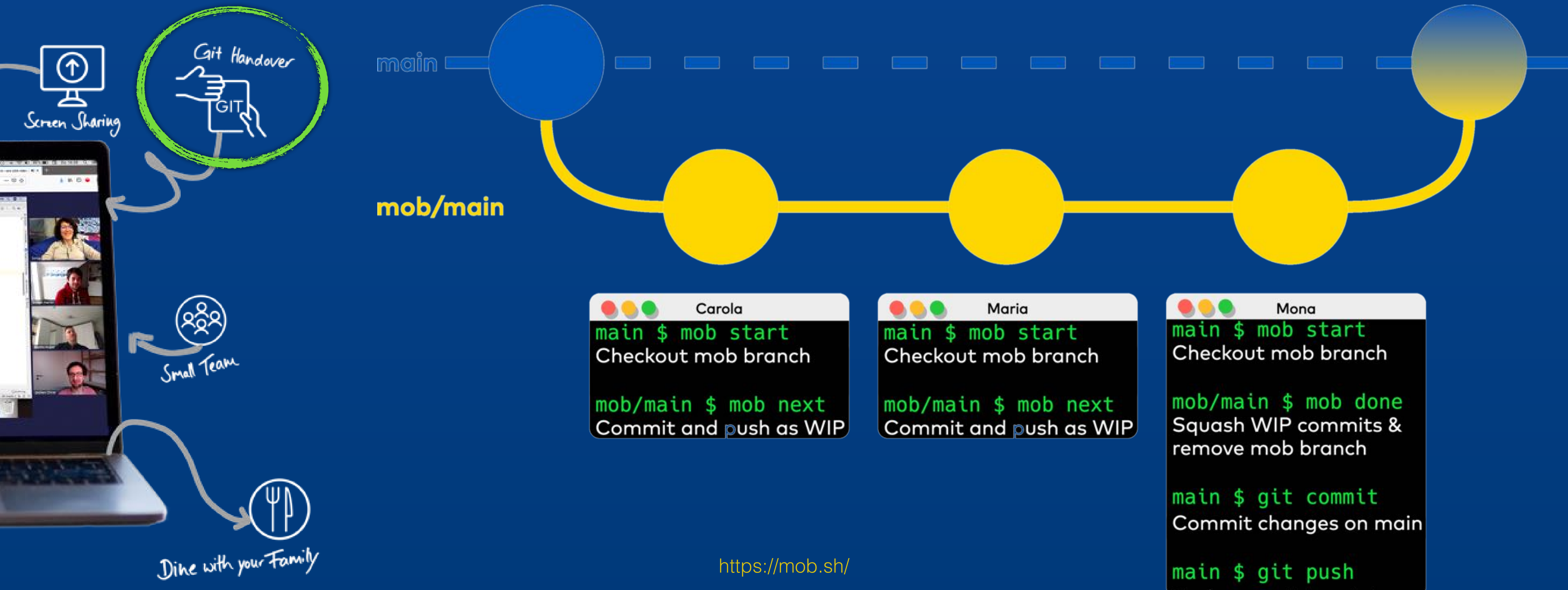


# Gemeinsam remote entwickeln





# Gemeinsam coden mit Git-Handover





*Arbeit **sichtbar** machen*

Zusammenarbeit **anbieten**



# Arbeit *sichtbar* machen

# Zusammenarbeit **anbieten**

The screenshot displays the Microsoft Teams interface. On the left, the navigation pane shows the current team: "904 - Agile Development & Coaching". The selected channel is "Mob-Programming-Sessions", which has 2 active meetings. Below the channel name, a list of topics is visible: "Allgemein", "Lesecke", "Rückmeldung erforderlich", "Technical Agile Coaching (TAC)", "Teststrategie", "Testen4TK", "Allgemein", "Brainstorming und Austausch", "Fragen, Probleme, Bugs", and "Was gibt es Neues".

The main chat area shows a meeting titled "Mob-Programming-Sessions" with tabs for "Beiträge" and "Dateien". The chat history includes:

- A meeting titled "APP-973 beendet" with a "Antworten" button.
- A meeting titled "Redesign / Testability gestartet" with a "Antworten" button.
- A message from "Much, Thomas" at 10:03 asking "Könnte Hexagonale Architektur interessant sein?" with a link to a Wikipedia article and a thumbs-up reaction.
- A meeting titled "Besprechung beendet" with a star rating and the question "Wie war die Anrufqualität?".
- A meeting titled "MARVIN-42" that started at 04:41, with a "Teilnehmen" button.
- A meeting titled "Besprechung in „Mob-Programming-Sessions“ beendet".
- A meeting titled "APP-2342" that started at 02:42, with a "Teilnehmen" button.

At the bottom, the chat continues with a message from "Much, Thomas" at 10:09 asking for support, and a response from "Bittkowski, Nils" at 10:10.





**John Cutler**  
@johncutlefish



A mixed remote / non-remote team  
is like dialing in to have dinner with a  
group of friends in a restaurant.

[Tweet übersetzen](#)

21:02 · 28.05.21 · [Twitter Web App](#)

*Einer remote?*

**Alle remote!**



Egal ob remote oder vor Ort ...

*Es wird 2er-Teams geben ...*

**Euer Pair-Programming wird besser**

durch das (Aus-)Üben von Mob-Programming!



"Pair Programming is like going on a date.  
Mobbing is like **having dinner with friends.**  
Different dynamic."





*Wie häufig?*

**Regelmäßig!**



*Am Code herumprobieren*

Als Team **experimentieren**



*Selbstverständlichkeiten erfragen*

**Angstfreie** Kommunikation



*Schnell viel Code ist **nicht das Ziel!***

**Entspannen** an der Tastatur



**Einfache, kleine Schritte** anstreben

*Komplexität kommt früh genug*





Von **Erfahrungen** profitieren  
*Neue Impulse bekommen*



# Wissen **und Können**

*Know how*

... und **Wollen**,  
weil wir **ein Team**  
sind 🦵😊



justsharing.dev

# Wie legen wir los?

1..N

**Mob-Programming-Workshops**

je ca. 3h

mit Code-Katas

**„Normale“ Aufgaben**

situativ, spontan, **regelmäßig**

im Mob-Programming anfangen

jeweils > 1h, besser > 2h



# MOB MENTALITY



## Mob Mentality Show

1.18K subscribers

SUBSCRIBE

- HOME
- VIDEOS
- PLAYLISTS
- COMMUNITY
- CHANNELS
- ABOUT

Uploads PLAY ALL

SORT BY

<p>Mobbed Lean Public Speaking with Reinier Pamintuan 36:23</p>	<p>Thinking Big, Working Small, and Sense-Making Together with John Cutler 46:06</p>	<p>MASTERING FOCUS IN TEAM PROGRAMMING SESSIONS with Thomas Much 39:27</p>	<p>Mob Programming: Lean Turned up to 10 59:00</p>	<p>MOB PROGRAMMING 10 YEAR ANNIVERSARY PANEL with DanYoung Wang, Dexter Baga, and Woe 46:06</p>	<p>SOCIO-TECHNICAL TRAINING FROM THE BACK OF THE ROOM with Marco Conzelaro, Alessandro Di Giola, and Pedro Santos 45:56</p>
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<b>Mobbed Lean Public Speaking with Reinier...</b> 32 views · 19 hours ago	<b>Thinking Big, Working Small, and Sense-Making Together...</b> 372 views · 7 days ago	<b>Mastering Focus in Team Programming Sessions with...</b> 123 views · 2 weeks ago	<b>Lean Turned Up to 10</b> 265 views · 3 weeks ago	<b>Mob Programming 10 Year Anniversary Panel with...</b> 143 views · 4 weeks ago	<b>Socio-Technical Training from the Back of the Room...</b> 222 views · 1 month ago
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<https://www.mobmentalityshow.com/>

<p>DEVELOPING DEEP TEAM TRUST via Mob Programming with... 91 views · 1 month ago</p>	<p>The Future of Product Development 109 views · 1 month ago</p>	<p>Agile + Craftsmanship Tag Team Coaching with Nicola... 149 views · 1 month ago</p>	<p>Mob Programming? with... 226 views · 2 months ago</p>	<p>The Hidden Costs of Software Estimates 227 views · 2 months ago</p>	<p>MANY MORE MUCH SMALLER STEPS with GeePaw Hill 382 views · 2 months ago</p>
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<p>Mob Programming in Intro Comp-Sci Courses with... 69 views · 2 months ago</p>	<p>MOB PROGRAMMING ROLES: MAJOR PAIN &amp; DR. FEEL GOOD 11:52 87 views · 2 months ago</p>	<p>SOCRATIC LEARNING AND TECH OPTIMIZED INTERPERSONAL INTERACTIONS with Michael Strong 42:55 84 views · 3 months ago</p>	<p>Legacy Code Refactoring and Mending with M. Scott Ford 34:29 173 views · 3 months ago</p>	<p>MODELS OF TEACHING AND LEARNING IN MOB PROGRAMMING 21:35 101 views · 3 months ago</p>	<p>AI ENABLED MOBS FOR LEARNING with Carolyn Rosé 37:55 70 views · 3 months ago</p>
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<b>Mob Programming in Intro Comp-Sci Courses with...</b> 69 views · 2 months ago	<b>Mob Programming Roles: Major Pain and Dr. Feel Good</b> 87 views · 2 months ago	<b>Socratic Learning and Tech Optimized Interpersonal...</b> 84 views · 3 months ago	<b>Legacy Code Refactoring and Mending with M. Scott Ford</b> 173 views · 3 months ago	<b>Models of Teaching and Learning in Mob...</b> 101 views · 3 months ago	<b>AI Enabled Mobs for Learning with Carolyn Rosé</b> 70 views · 3 months ago
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# Mob-Programming



code.talks

## Fragen?

Pair  
Programming

Coaching

Remote

Team-Building

Strong Style Navigation

 @thmuch

Collective Code Ownership

Know-How-  
Transfer

Pausen machen

Mini-Retros

Code-Katas

Geschwindigkeit





code.talks

Vielen Dank 😊

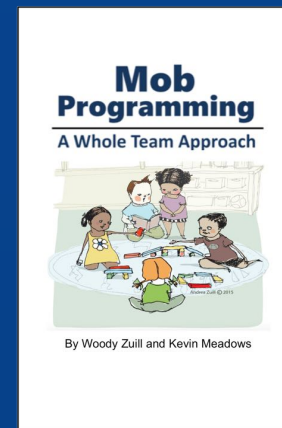


[www.tk.de/IT](http://www.tk.de/IT)

 @thmuch

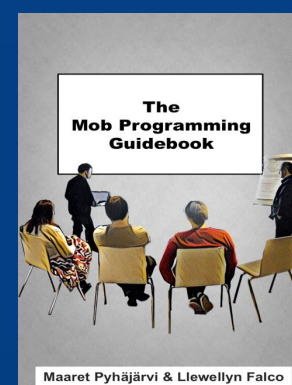


# Weitere Informationen



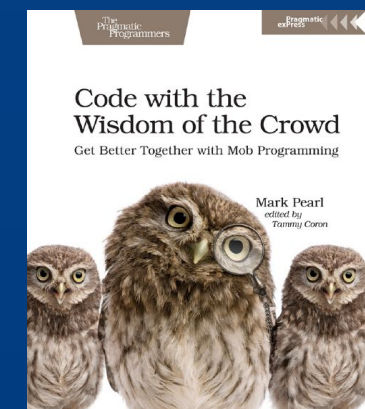
<https://mobprogramming.org/>  
<https://leanpub.com/mobprogramming>

<https://www.remotemobprogramming.org/>  
<https://leanpub.com/remotemobprogramming>

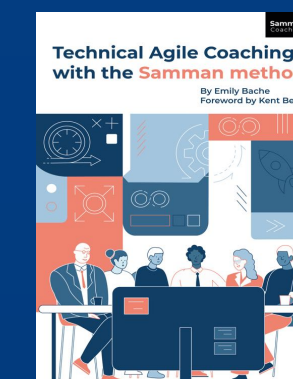


<https://mobprogrammingguidebook.xyz/>  
<http://www.mobprogrammingguidebook.com/>

<https://pragprog.com/book/mpmob/code-with-the-wisdom-of-the-crowd>



<https://leanpub.com/techagilecoach>



<https://www.chrislucian.com/p/companies-that-are-mob-programming.html>  
<https://trello.com/b/1lfMkCOh/software-profession-resources>



# Code-Katas

<https://www.codewars.com/kata>

[https://sammancoaching.org/kata\\_descriptions/](https://sammancoaching.org/kata_descriptions/)

<https://kata-log.rocks/>

<https://codingdojo.org/kata/>

<http://codekata.com/>

u.v.a.m.



# Code-Sharing

## **Git Handover**

<https://mob.sh/>

IntelliJ Plug-in: <https://plugins.jetbrains.com/plugin/14266-mob>

## **IDE Sharing**

<https://www.jetbrains.com/de-de/code-with-me/>

<https://visualstudio.microsoft.com/services/live-share/>

<https://www.codetogether.com/>

<https://duckly.com/>

<https://git.live/>

<https://codeshare.io/>

<https://gitpod.io/>

<https://theia-ide.org/>

<https://aws.amazon.com/de/cloud9/>

## **Cloud Dev VM**

<https://claremacrae.co.uk/blog/2020/12/virtual-machines-for-online-mobbing-and-training>



# Online-Whiteboards

Miro

*<https://miro.com/>*

Mural

*<https://www.mural.co/>*

Conceptboard

*<https://conceptboard.com/>*

Microsoft Teams Whiteboard

*[diagrams.net](https://diagrams.net/) / [draw.io](https://draw.io/)*

*[excalidraw.com](https://excalidraw.com/)*



# Online-Timer

**<https://timer.mob.sh/>**

**<https://cuckoo.team/>**

<https://mobti.me/>

<http://mobster.cc/>



# Aber die Geschwindigkeit!



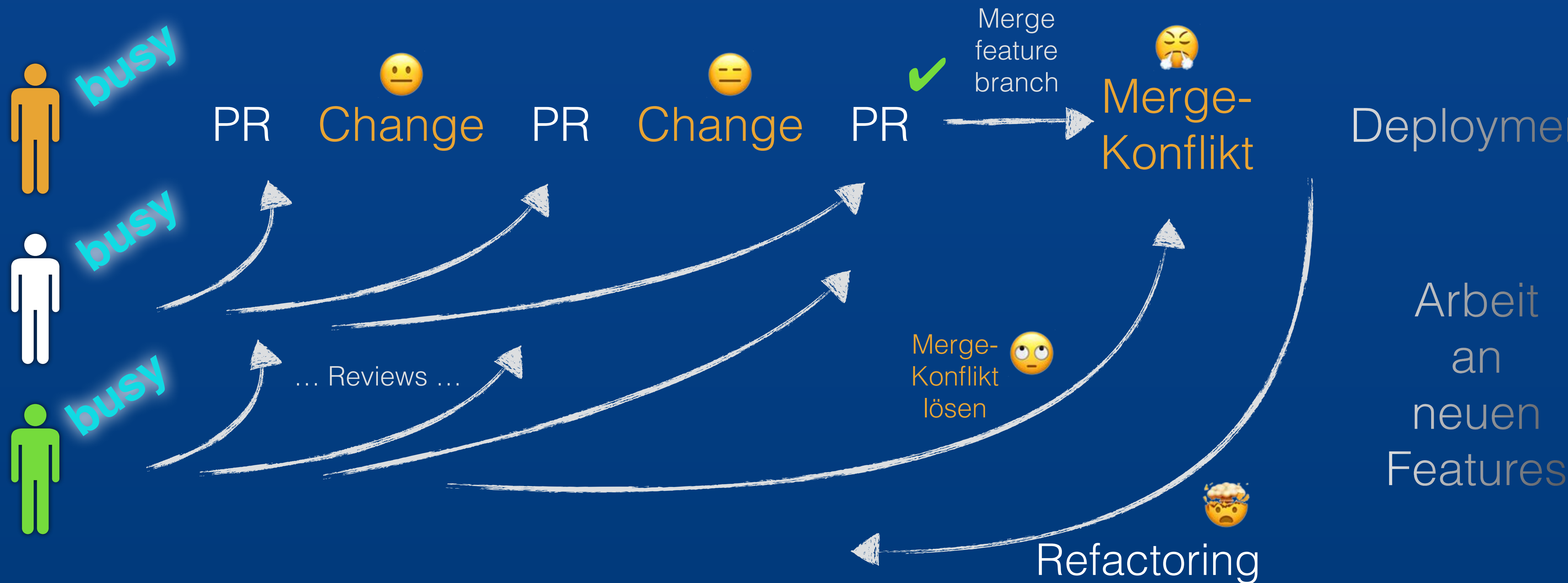
„If you need to be fast, **slow down**“



Seid **nicht langsam**.  
Aber vermeidet Hektik!



# Getrennte Arbeit, Warten & Frust



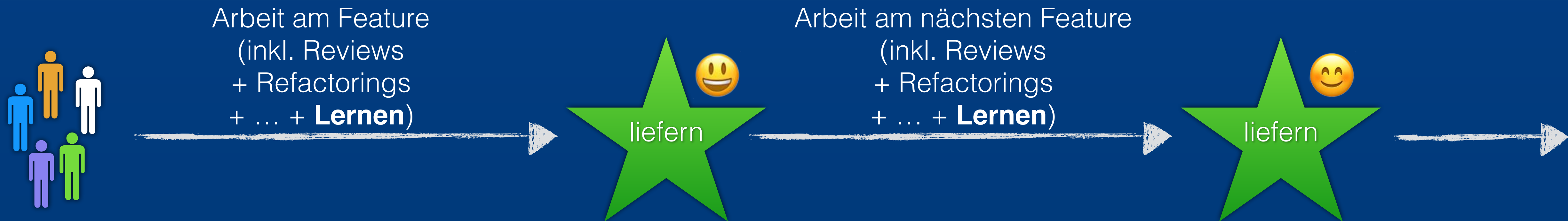


# Flow

Kontinuierlich Wertvolles an unsere Kunden ausliefern

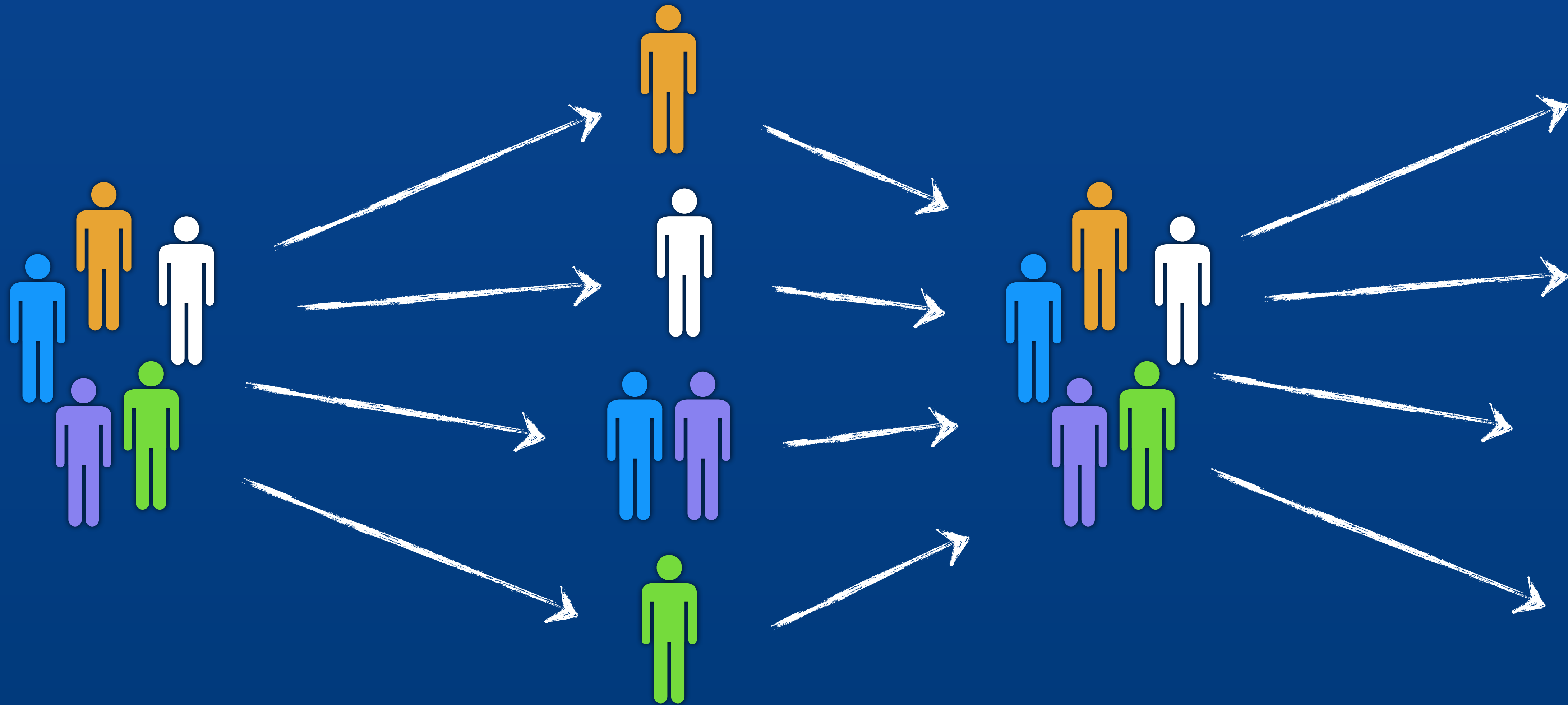
Anzahl der erledigten Dinge maximieren

Verschwendung (Wartezeit) minimieren





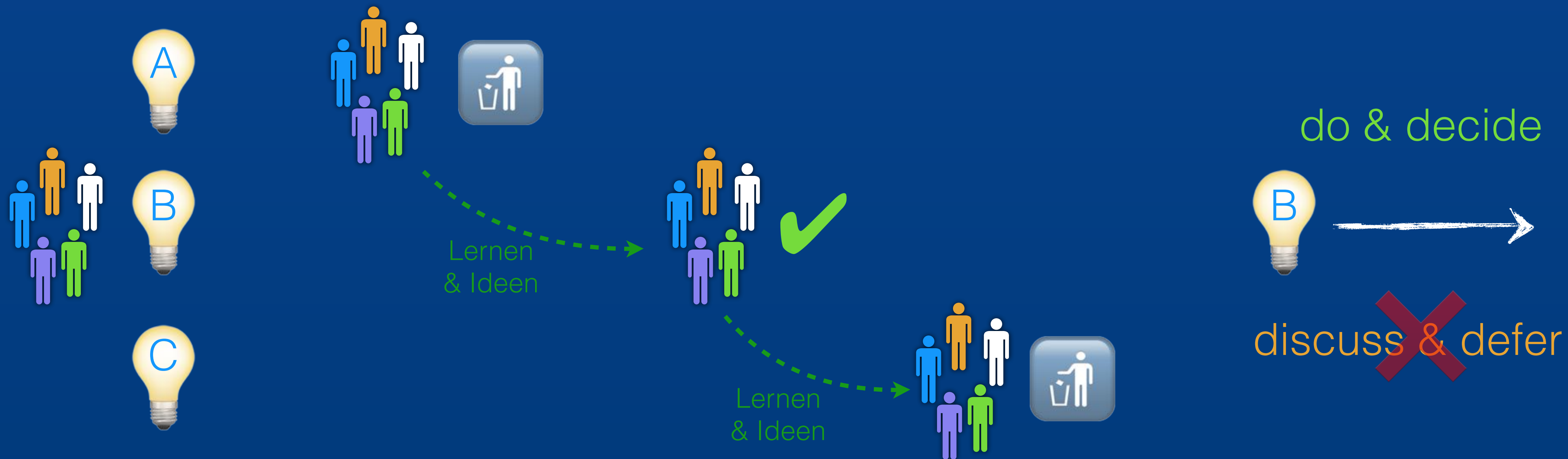
# Zusammen starten!





# Team-Entscheidungen

Mehr als eine Idee? *Probiert alle aus!*





# Mob Programming

"It's about getting the **BEST** (not the **most**) from your team."

– Llewellyn Falco

"**All the brilliant minds** working on the same thing,  
at the same time, in the same space, and at the same computer."

– Woody Zuill

"Continuous Integration of Ideas"

– Joshua Kerievsky