

Successfully scaling GitHub Copilot to thousands of developers

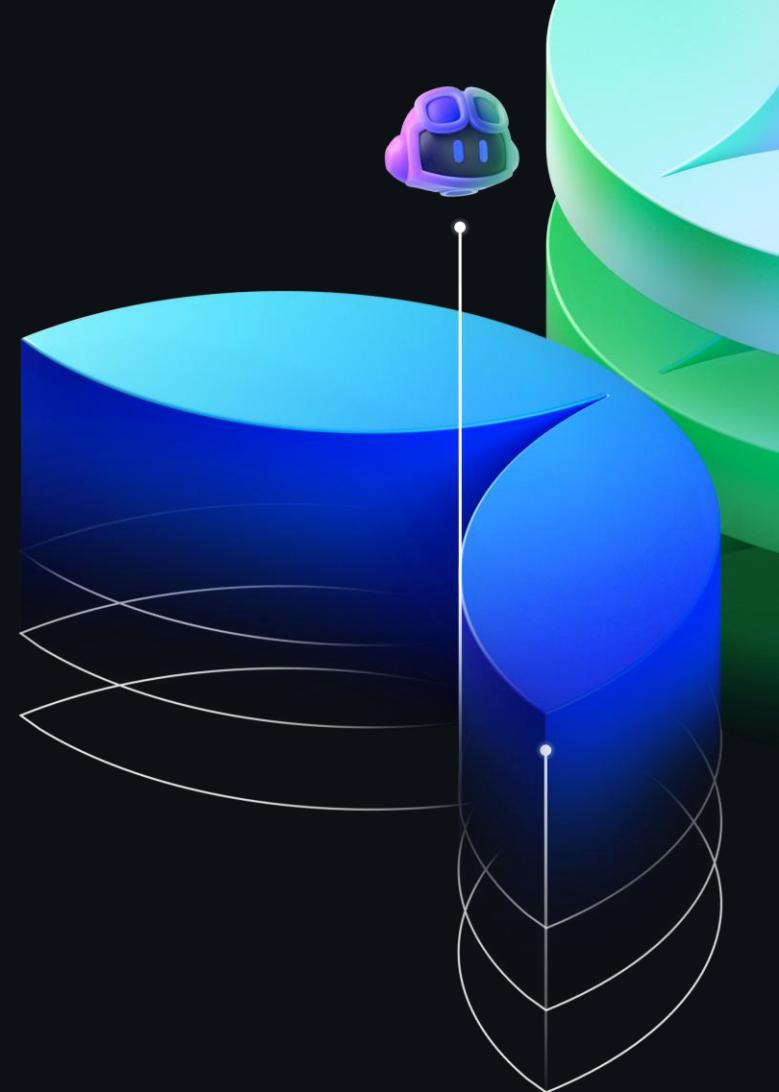


Rob Bos

DevOps Consultant | GitHub Trainer @ Xebia

Microsoft MVP | GitHub Star

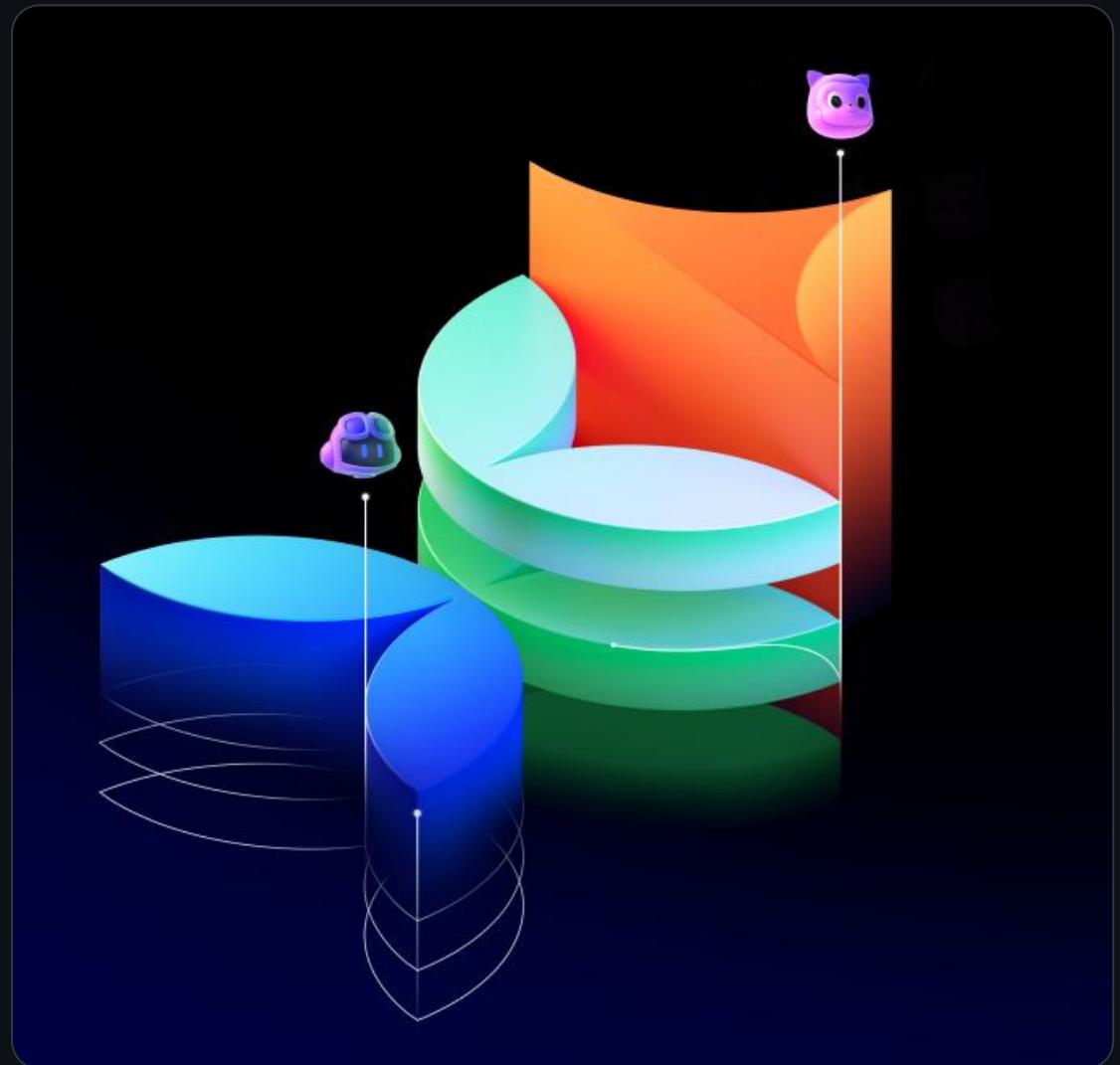
Blog: <https://devopsjournal.io>





Agenda

- 01 Common mistakes
- 02 Rollout & enablement
- 03 Success factors



Thomas Dohmke, CEO of GitHub

**“With AI at every step, we will
realize the 10X developer”**

Web Summit Rio 2023

Common mistakes



Customer statements

“Just another developer tool”

“A carpenter does not need training when they get a new hammer”

“We don’t train people how to use an IDE either”



“You have to acknowledge there is a learning curve to get the most out of GitHub Copilot”

Rob Bos



9 Levels of Enlightenment:

<https://github-copilot.xebia.ms>

“You have to acknowledge there is a learning curve to get the most out of GitHub Copilot”

Rob Bos



Title

- Explain what you want to achieve 08:08
- Know your context 06:53
- Copy method calls as comments 07:33
- Top-down programming instead of bottom-up 08:14
- Typos in your prompt do not matter 06:12
- Use the chat 10:05
- #file is your biggest friend 07:29
- Accept the truth 11:45
- Be smart 09:57

9 Levels of Enlightenment:

<https://github-copilot.xebia.ms>



Engineer's statements on “enablement”

No training

Online video

Focus on
productivity

YouTube

By yourself

We're not on GitHub?

Magic

Only part of the team got a license

Hype

Glorified IntelliSense

Gets in the way

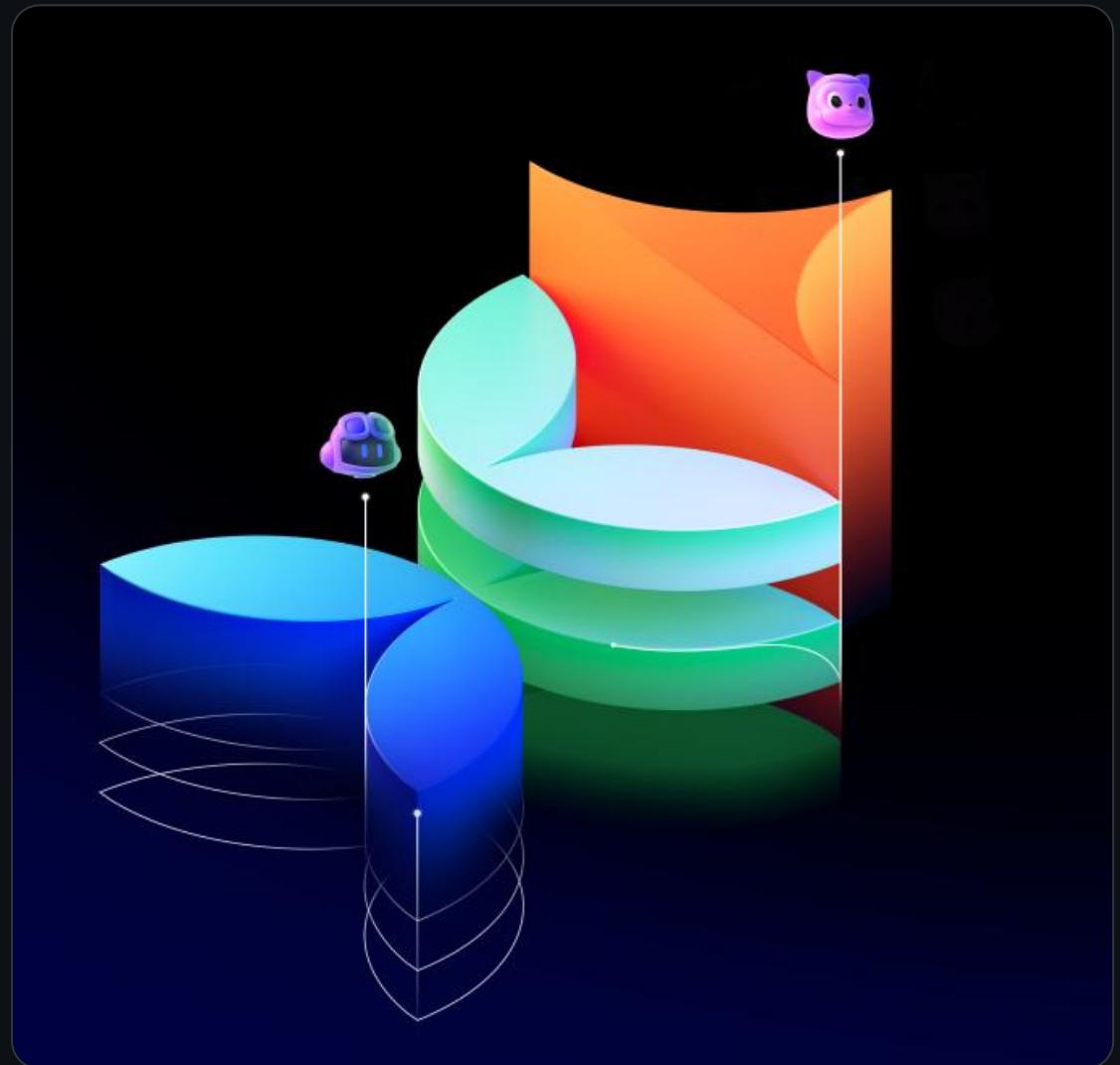
Common mistakes during rollout

- 1. No enablement at all**
- 2. Focus on productivity**
- 3. Focus on individuals**
- 4. Skipping culture / impact / equality**
- 5. No follow up**

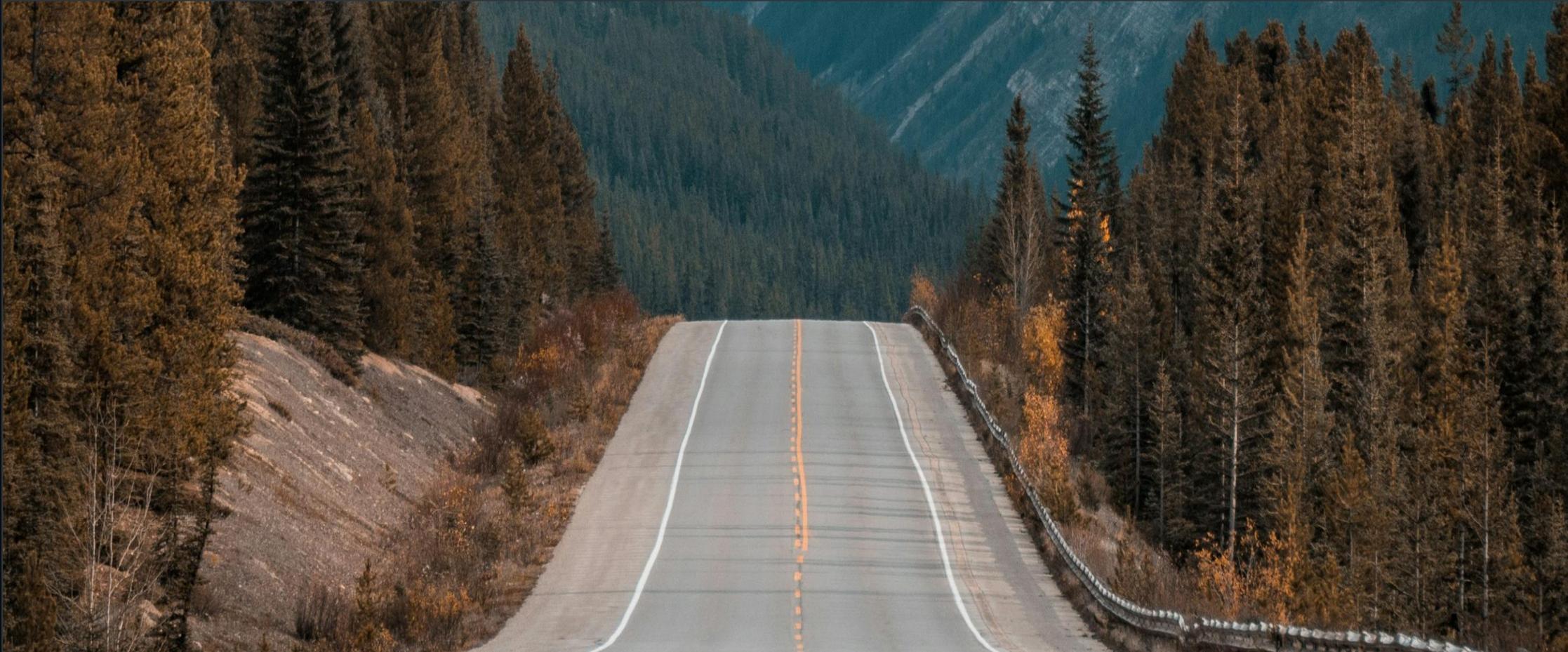


Agenda

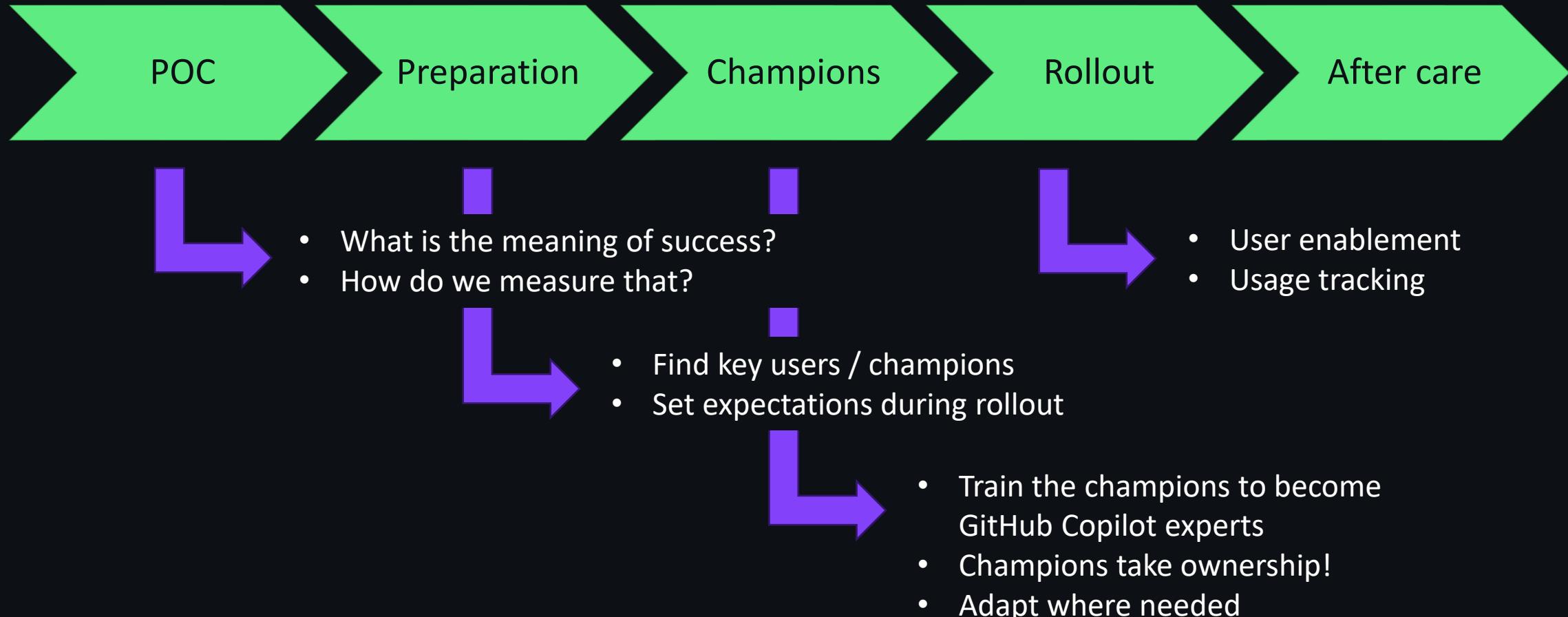
- 01 Common mistakes
- 02 Rollout & enablement
- 03 Success factors



Rollout & enablement

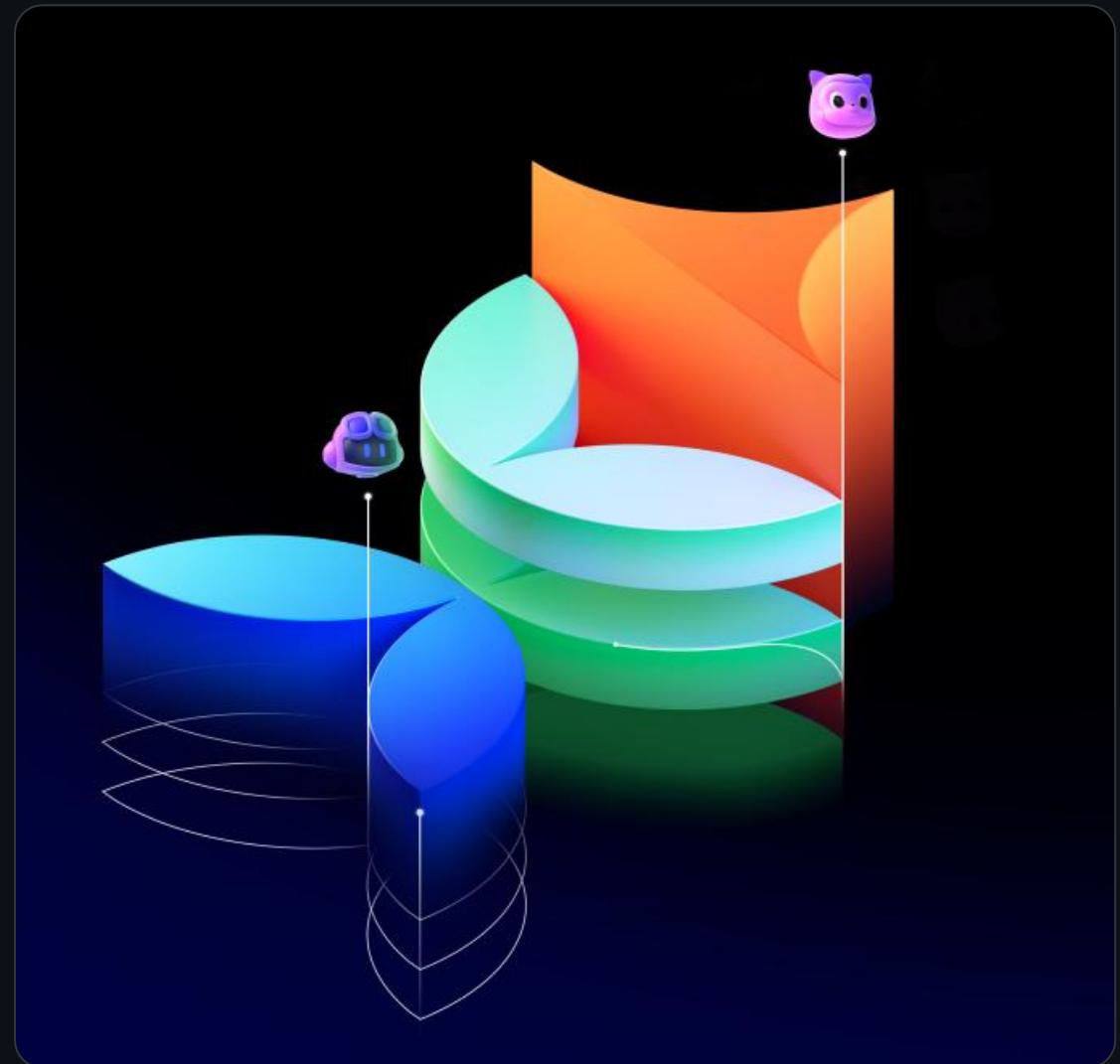


Rollout & Enablement Phases:



Agenda

- 01 Common mistakes
- 02 Rollout & enablement
- 03 Success factors



Success factors



Team / community efforts

Enable entire teams

Share stories

Measure impact and discuss with the
team





Enthusiastic Champions

Share their own stories

On their own tech stack

Can relate

Authenticity

Growth mindset / continuous learning

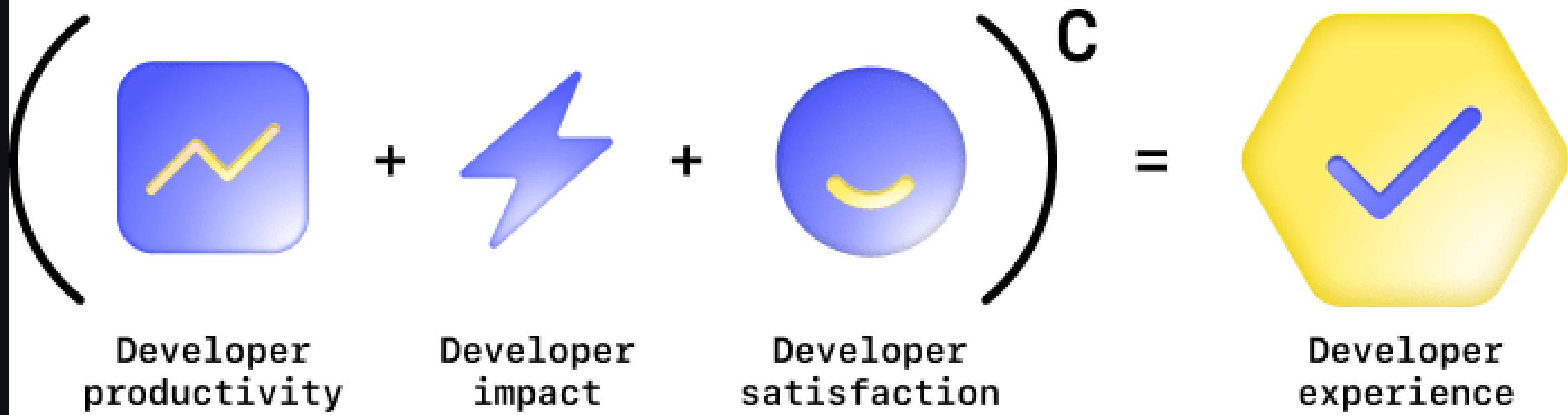


Carol Dweck

Link: https://www.ted.com/talks/carol_dweck_the_power_of_believing_that_you_can_improve?subtitle=en

Developer Experience (DevEx)

The collaboration effect on developer experience



DevEx: Making an impact



What do we get with better DevEx?

Developers: more productivity and creativity

Teams: better code quality and innovation

Organizations: more retention and profit

Support flow state: fewer interruptions, deeper work, and engaging tasks

50%↑ //significant time for deep work increases productivity

/Flow state

Increase cognitive ease: intuitive processes, understandable code, and easier deployment

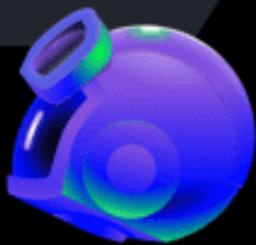
50%↑ //intuitive processes increase innovation

/Cognitive ease

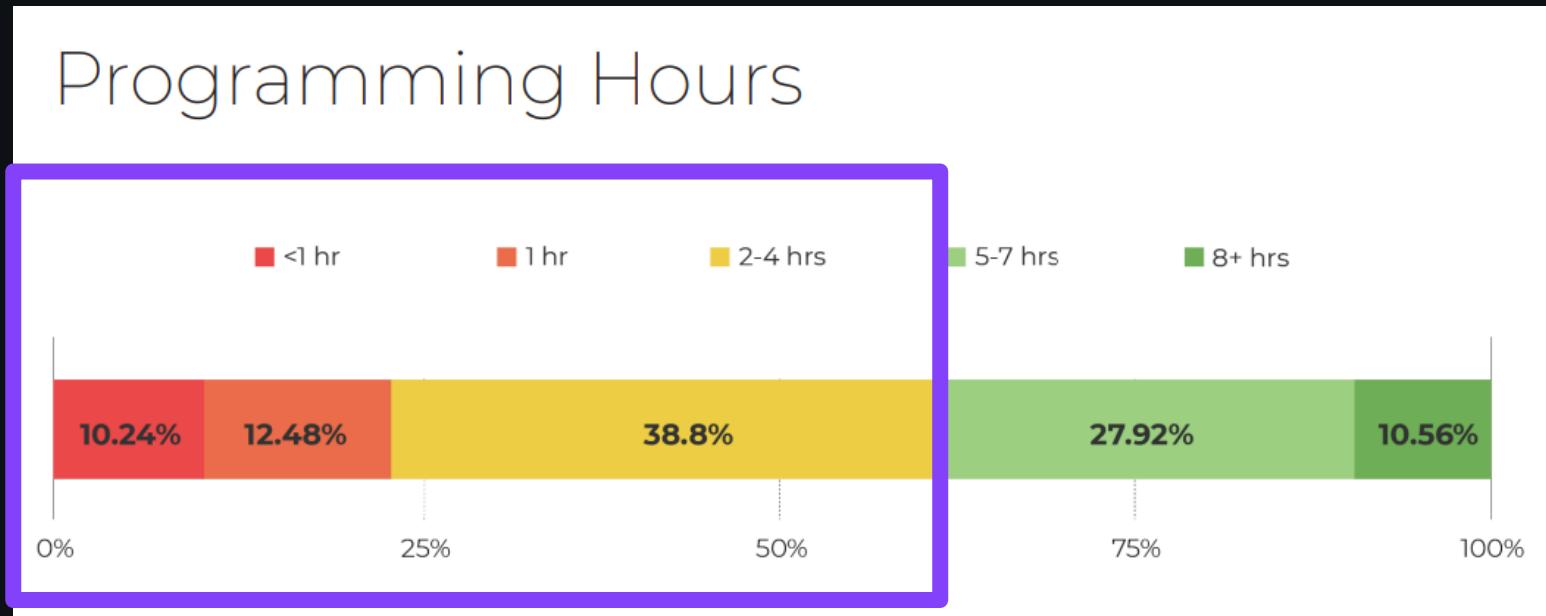
Optimize feedback loops: quick responses and code reviews

20%↑ //fast code review increases innovation

/Feedback loops



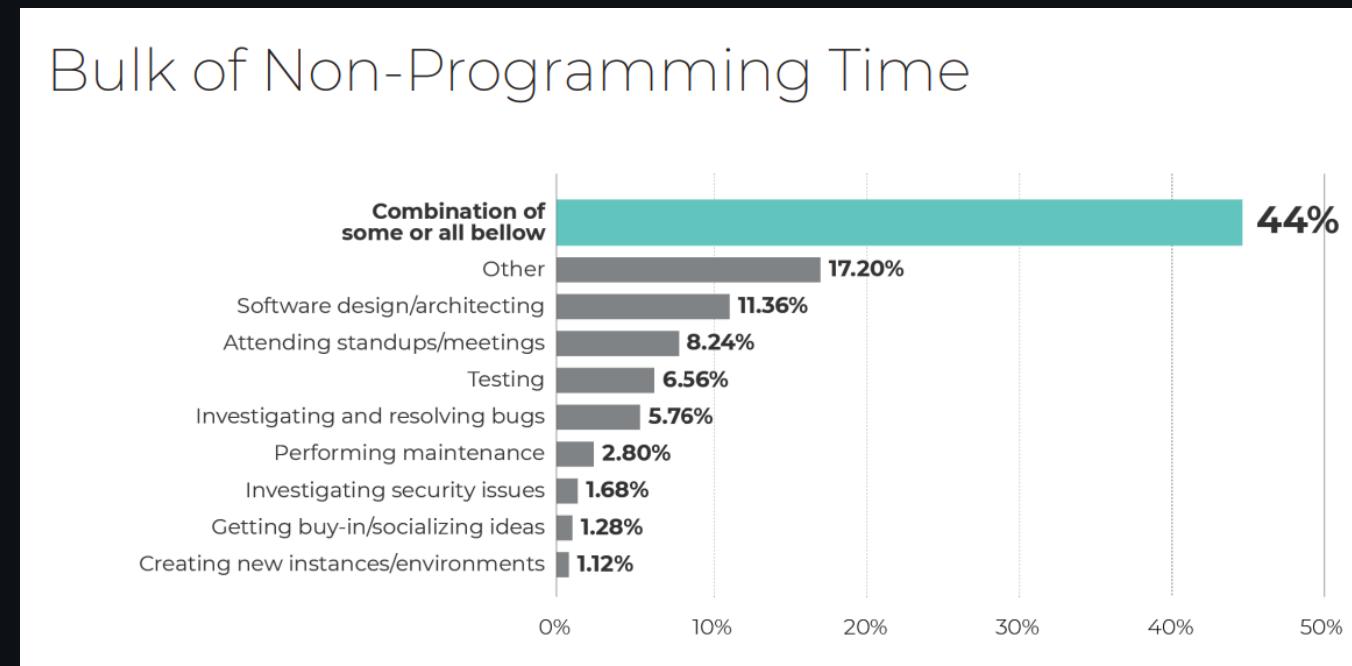
Look at the other activities



Source: <https://www.activestate.com/wp-content/uploads/2019/05/ActiveState-Developer-Survey-2019-Open-Source-Runtime-Pains.pdf>

Look at the other activities

Less then 2-4 hours a day
spend on programming



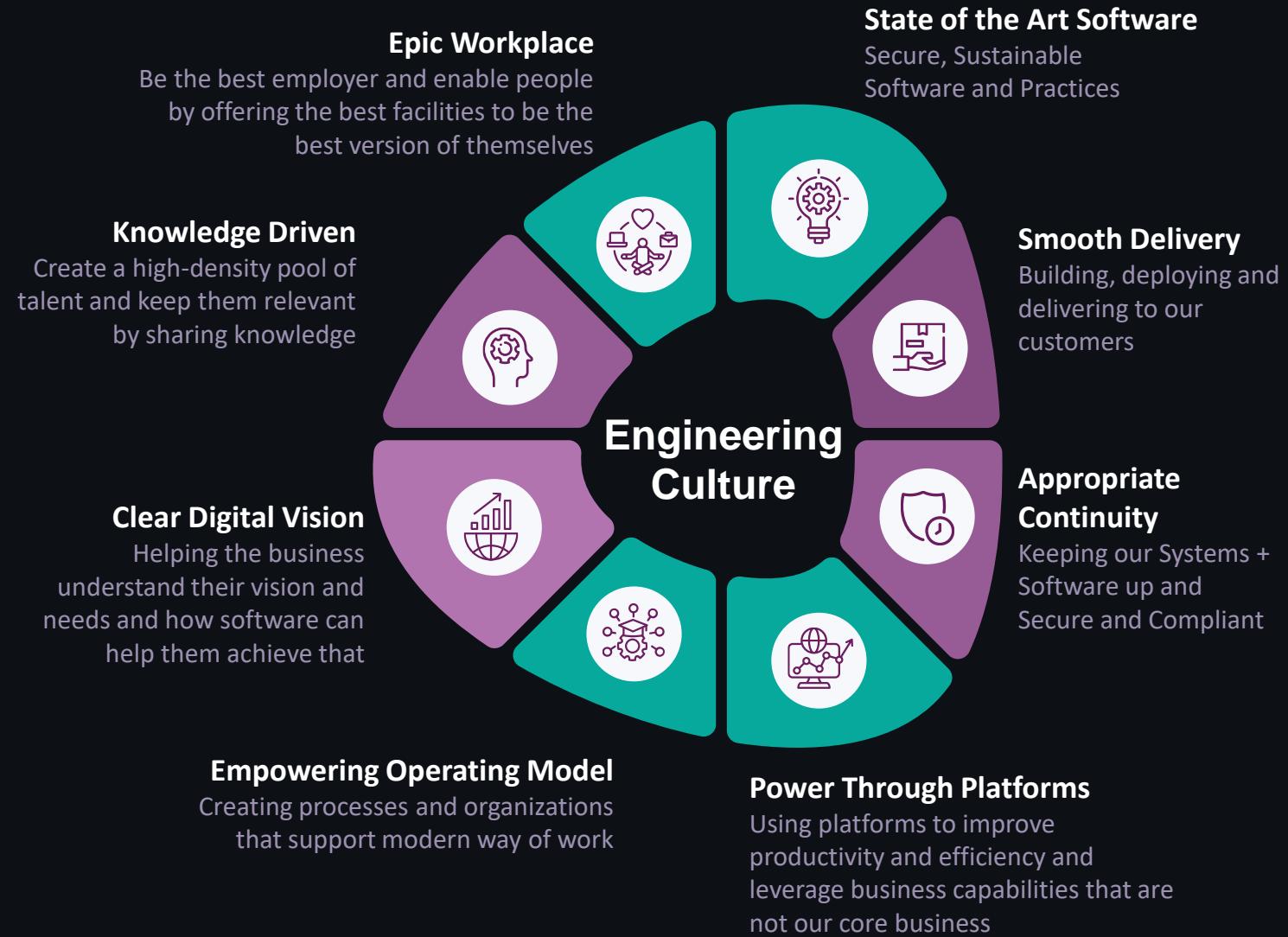
Source: <https://www.activestate.com/wp-content/uploads/2019/05/ActiveState-Developer-Survey-2019-Open-Source-Runtime-Pains.pdf>

Success factors

- Team / community effects
- Enthusiastic champions
- Growth mindset / continuous improvements
- DevEx
- Look at the activities around writing code
- Engineering culture



GitHub Copilot ties into many things!





GitHub Copilot ties into many things!

Download e-book:
<https://pages.xebia.com/engineering-culture-ebook>

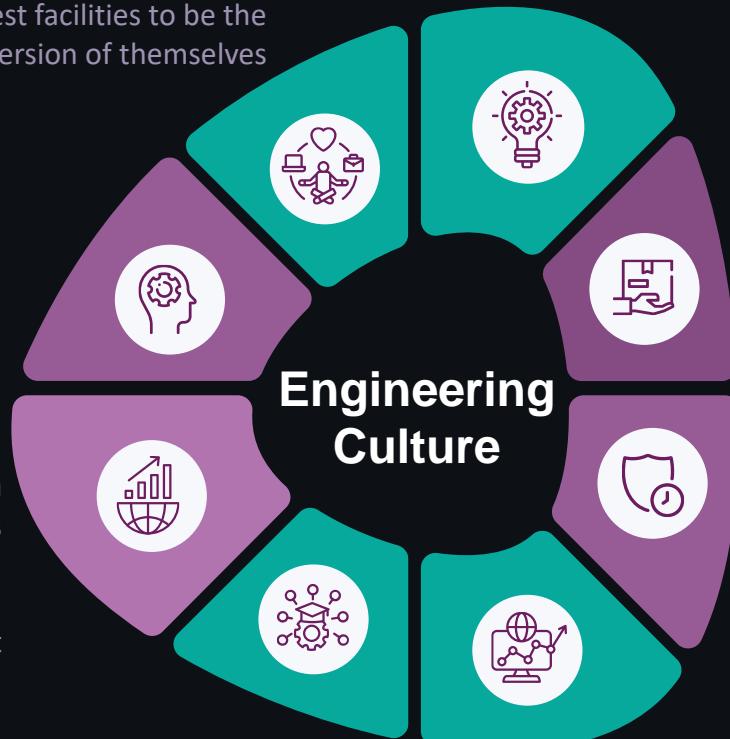
Epic Workplace
Be the best employer and enable people by offering the best facilities to be the best version of themselves

Knowledge Driven
Create a high-density pool of talent and keep them relevant by sharing knowledge

Clear Digital Vision
Helping the business understand their vision and needs and how software can help them achieve that

Empowering Operating Model
Creating processes and organizations that support modern way of work

State of the Art Software
Secure, Sustainable Software and Practices



Smooth Delivery
Building, deploying and delivering to our customers

Appropriate Continuity
Keeping our Systems + Software up and Secure and Compliant

Power Through Platforms
Using platforms to improve productivity and efficiency and leverage business capabilities that are not our core business



Rob Bos

DevOps Consultant | GitHub Trainer @ Xebia

Microsoft MVP + MCT | GitHub Star

GitHub Accredited Trainer

LinkedIn Learning Instructor

Book author: “GitHub Actions in Action”

Blogger: <https://devopsjournal.io>

Meet me at the **Xebia** booth (Festival Pavilion)!