House Keeping

- Please change your screen names to exactly what you used on meetup sign up page

- **Keep your microphones off during all time except during QnA if you want to ask any question or make a comment**

- To be eligible for giveaway stay till the very end

- This meetup will be recorded and shared on Developer Nation channels, so if you're not comfortable showing your face please keep the camera off.

- Code of Conduct : https://developernation.net/code-of-conduct/

Agenda

- Welcome and intro to the DN community

- **Behind the Code: Org Challenges, DORA Metrics & the AI Effect** - Insights from the State of Developer Nation report : by Liam Bollmann-Dodd

- Community Updates

- About the 30th Developer Nation survey and chance to win Keychron Keyboard

STATE
OF THE
DEVELOPER
NATION
29TH
EDITION

USAGE OF AI ASSISTANCE BETWEEN DORA PERFORMANCE GROUPS

Exploring GenAI usage between delivery performance groups

/DATA

MAY 2025

Liam Bollmann – Dodd
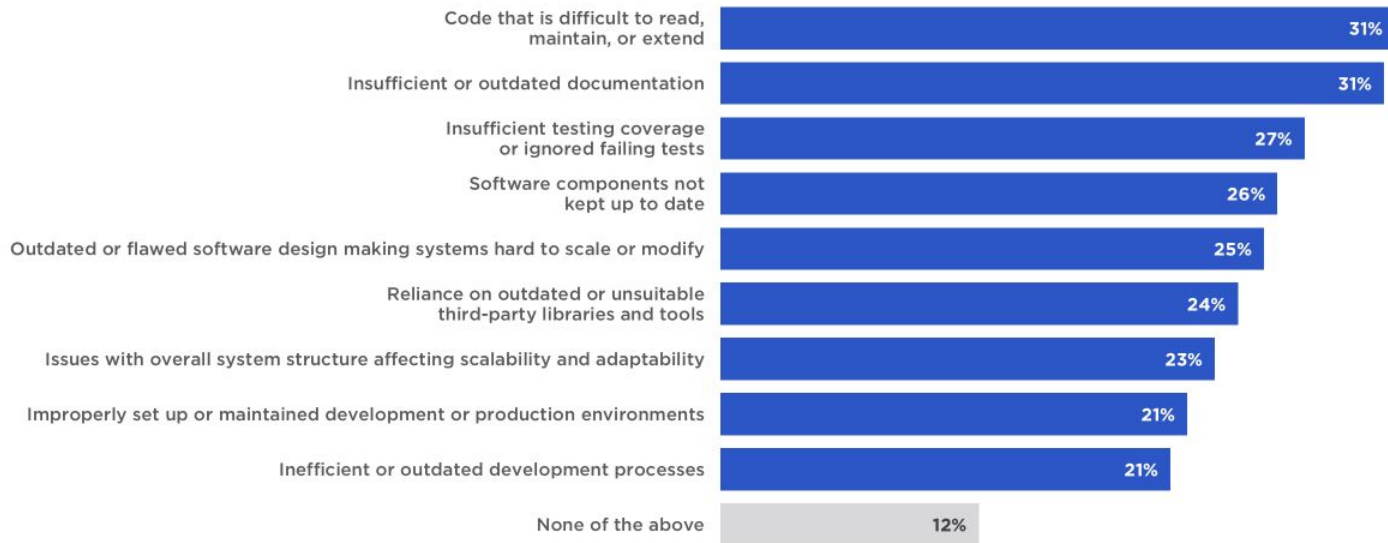
Senior Market Research Consultant

Liam is a former experimental antimatter physicist, and he obtained a PhD in Physics while working at CERN. He is interested in the changing landscape of cloud development, cybersecurity, and the relationship between technological developments and their impact on society.

✉ liam.dodd@slashdata.co

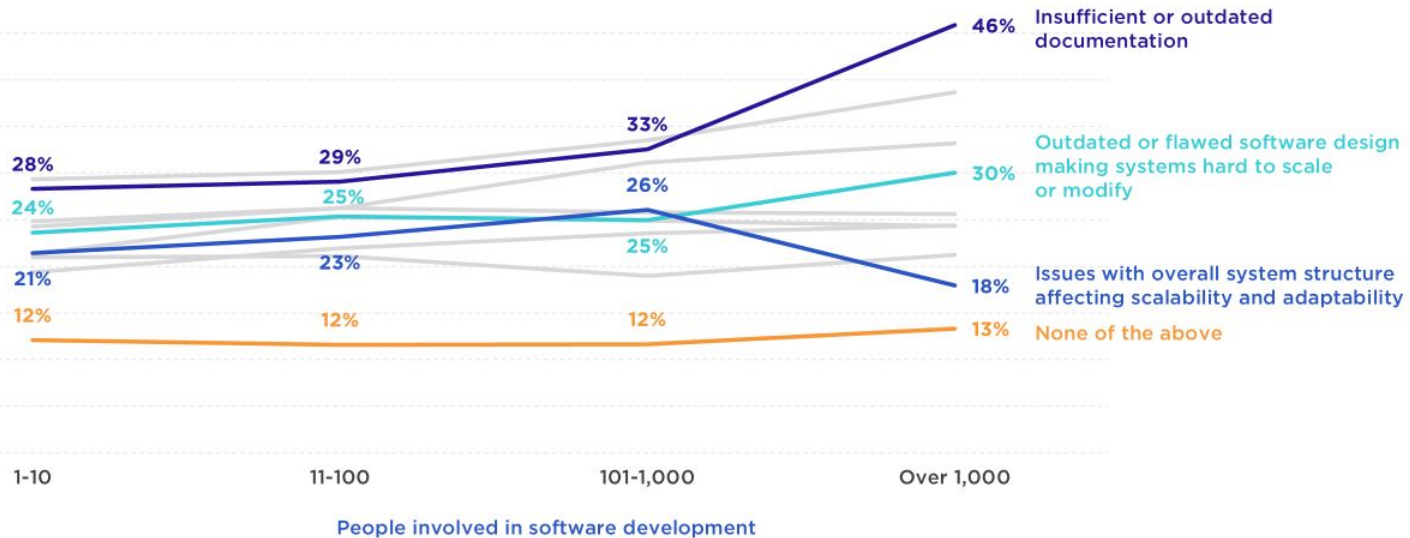**Challenges organisations face in software development projects**

/ DATA

Challenges organisations face in software development projects

Challenge	%
Code that is difficult to read, maintain, or extend	31%
Insufficient or outdated documentation	31%
Insufficient testing coverage or ignored failing tests	27%
Software components not kept up to date	26%
Outdated or flawed software design making systems hard to scale or modify	25%
Reliance on outdated or unsuitable third-party libraries and tools	24%
Issues with overall system structure affecting scalability and adaptability	23%
Improperly set up or maintained development or production environments	21%
Inefficient or outdated development processes	21%
None of the above	12%

Question wording: Which of these challenges, if any, does your organisation face in its software development projects? % of professional developers working for companies of at least two employees (n=6,351)

Challenges organisations face in software development projects

Software development challenges in organisations by the number of people involved in software development

- **46%** Insufficient or outdated documentation
- **33%**
- **28%**
- **29%**
- **26%**
- **30%** Outdated or flawed software design making systems hard to scale or modify
- **25%**
- **24%**
- **25%**
- **21%**
- **23%**
- **18%** Issues with overall system structure affecting scalability and adaptability
- **12%**
- **12%**
- **12%**
- **13%** None of the above

1-10   11-100   101-1,000   Over 1,000

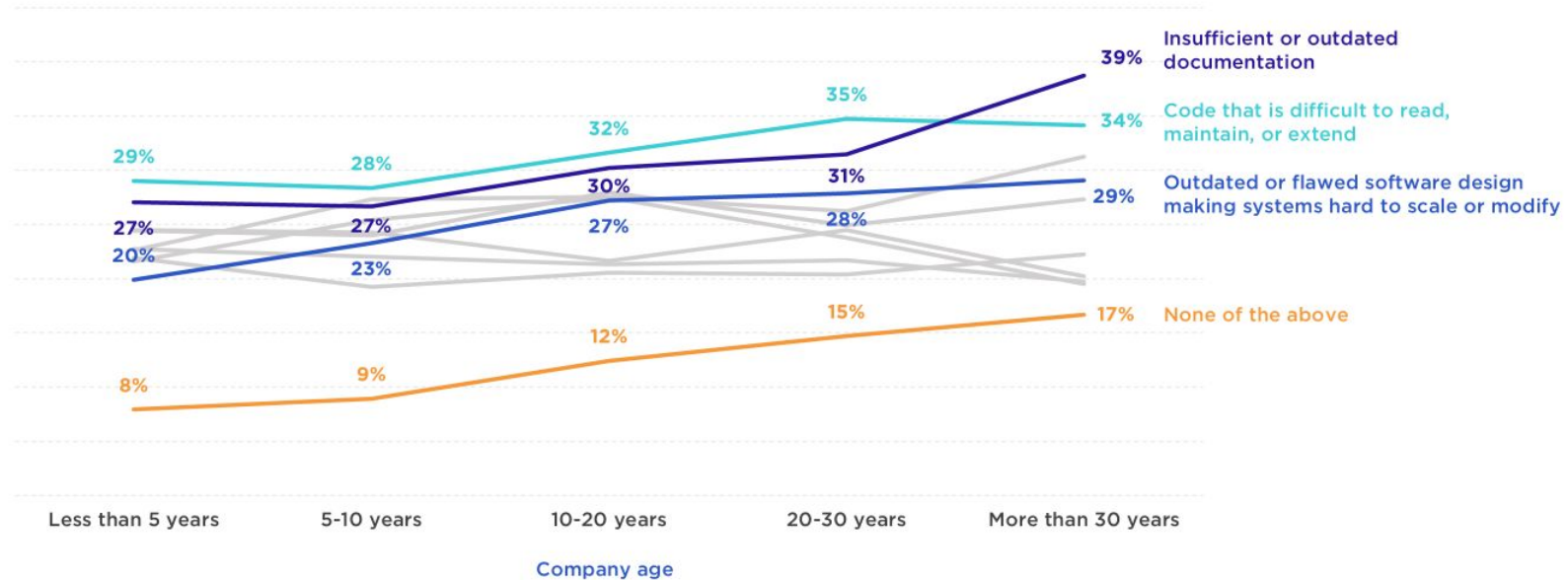People involved in software development

Question wording: Which of these challenges, if any, does your organisation face in its software development projects? | How many people in your organisation are involved in software development (incl. designers and product managers)?
% of professional developers working for organisations with development teams of each size (n=6,349)

Challenges organisations face in software development projects

Software development challenges in organisations by years of operation

39% Insufficient or outdated documentation

34% Code that is difficult to read, maintain, or extend

29% Outdated or flawed software design making systems hard to scale or modify

17% None of the above

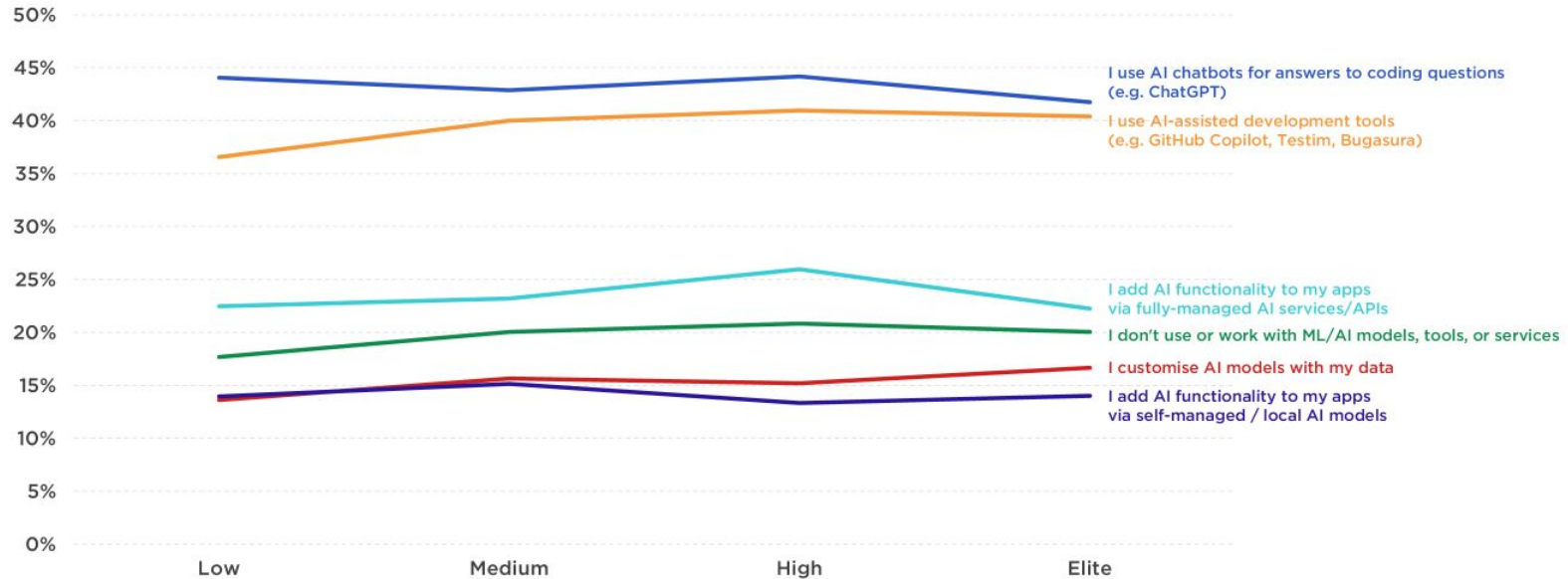| Less than 5 years	5-10 years	10-20 years	20-30 years	More than 30 years

Company age

Question wording: Which of these challenges, if any, does your organisation face in its software development projects? | How many years has your organisation been in operation?
% of developers working for organisations with each operational timeframe (n=6,343)

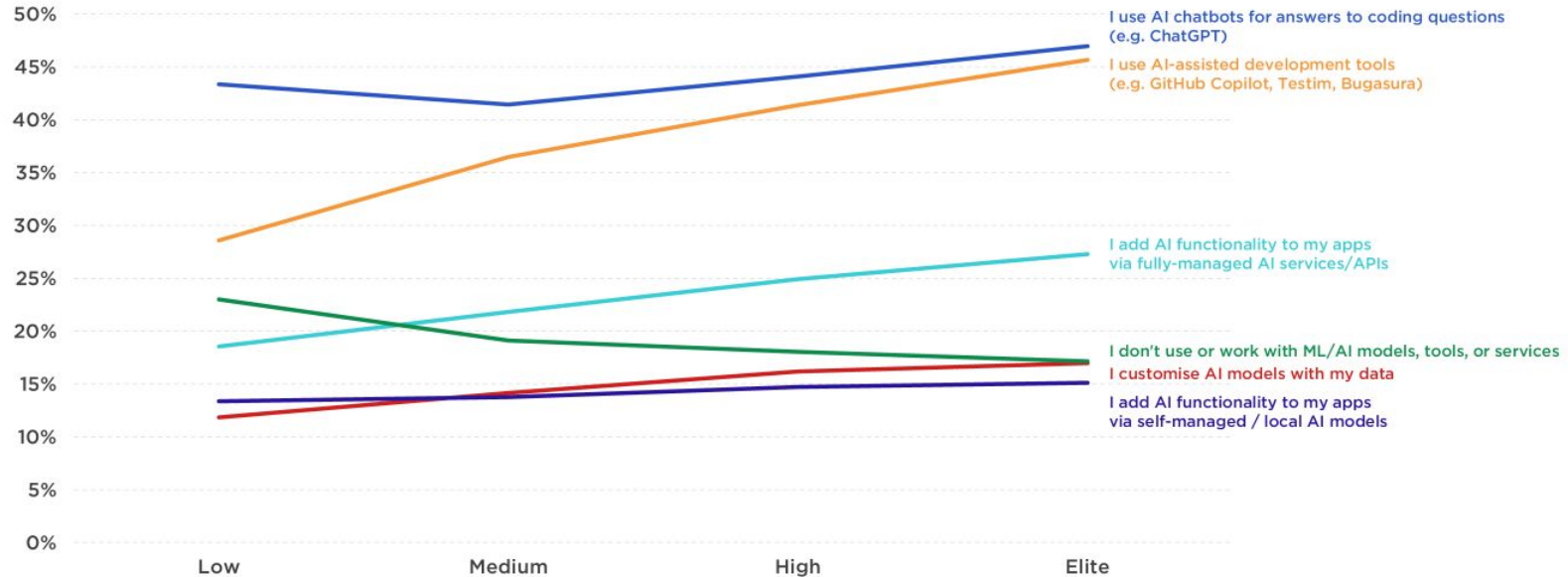# Challenges organisations face in software development projects

Involvement in AI-related activities by each lead time for code changes performance cluster

I use AI chatbots for answers to coding questions (e.g. ChatGPT)

I use AI-assisted development tools (e.g. GitHub Copilot, Testim, Bugasura)

I add AI functionality to my apps via fully-managed AI services/APIs

I don't use or work with ML/AI models, tools, or services

I customise AI models with my data

I add AI functionality to my apps via self-managed / local AI models

Question wording: On average, how long does it take you or your team to go from code committed to code successfully running in production? | Do you use or work with ML/AI models, tools, APIs, or services? If so, in which of the following ways?
% of developers in each DORA lead time for code changes performance group (n=6,039)

Challenges organisations face in software development projects

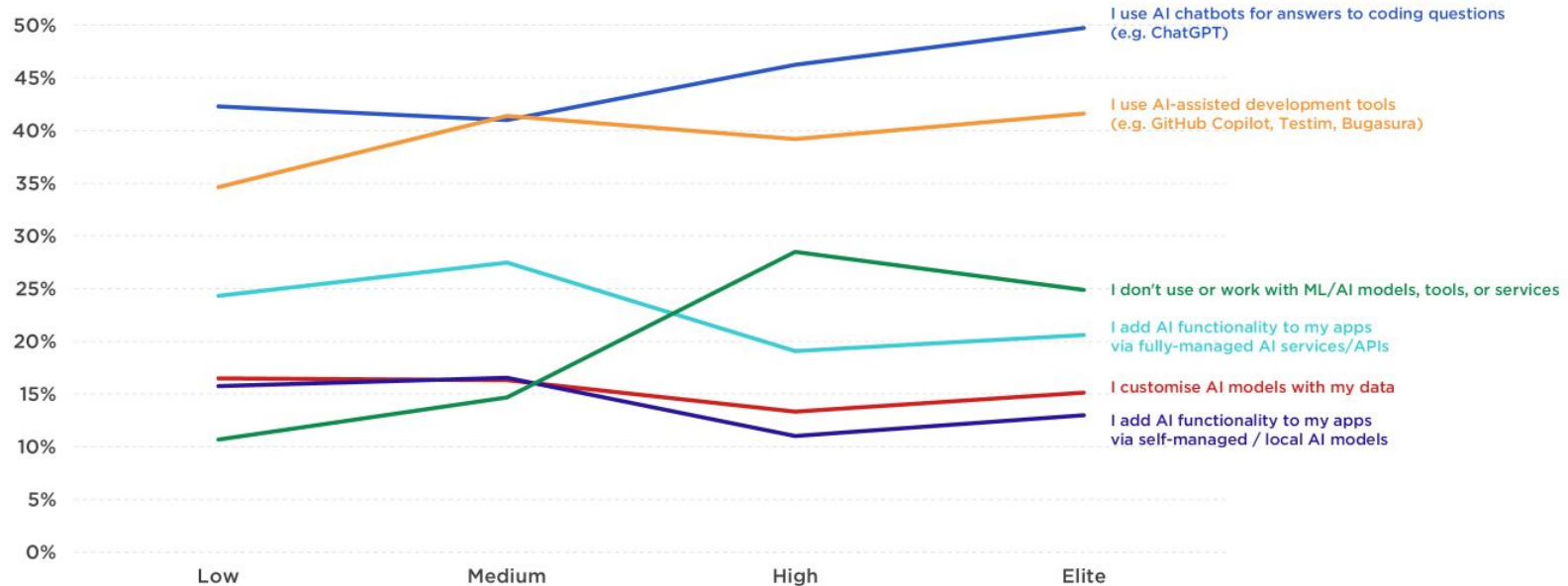## Involvement in AI-related activities by each deployment frequency performance cluster

I use AI chatbots for answers to coding questions (e.g. ChatGPT)

I use AI-assisted development tools (e.g. GitHub Copilot, Testim, Bugasura)

I add AI functionality to my apps via fully-managed AI services/APIs

I don't use or work with ML/AI models, tools, or services
I customise AI models with my data
I add AI functionality to my apps via self-managed / local AI models

Question wording: On average, how often do you or your team deploy code to production? | Do you use or work with ML/AI models, tools, APIs, or services? If so, in which of the following ways?
% of developers in each DORA deployment frequency performance group (n=5,986)

Challenges organisations face in software development projects

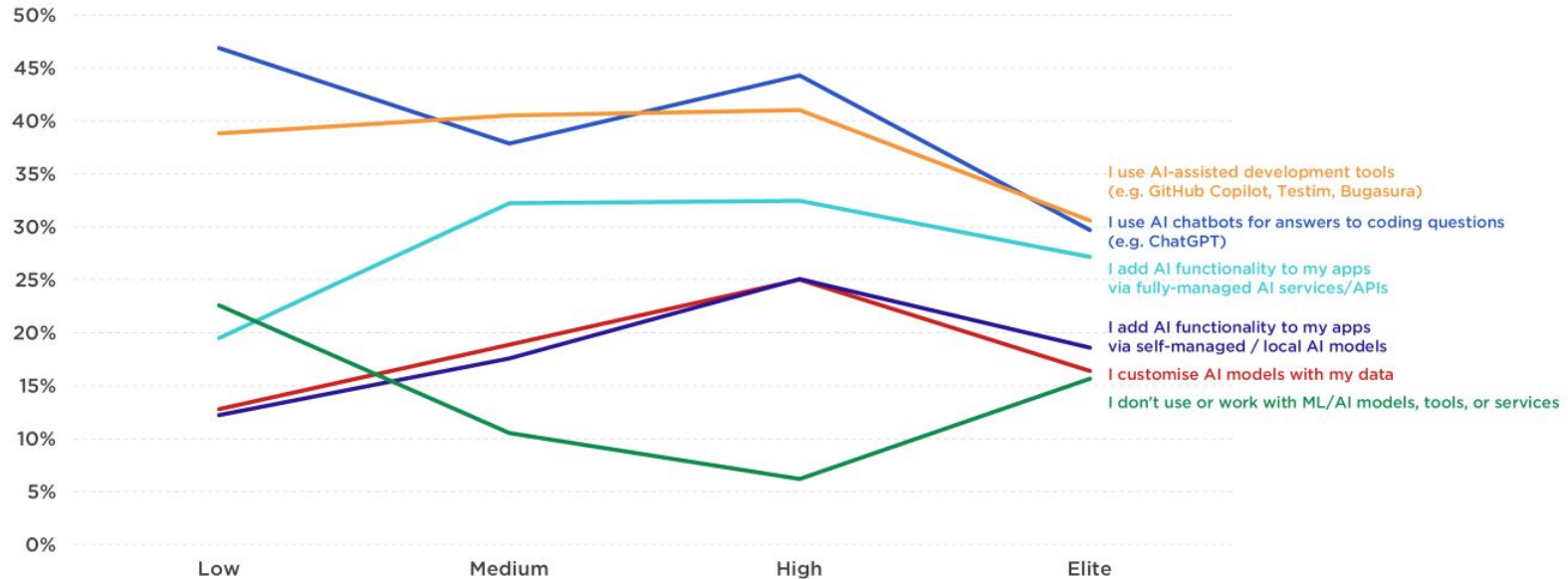## Involvement in AI-related activities by each time to restore service performance cluster

I use AI chatbots for answers to coding questions (e.g. ChatGPT)

I use AI-assisted development tools (e.g. GitHub Copilot, Testim, Bugasura)

I don't use or work with ML/AI models, tools, or services

I add AI functionality to my apps via fully-managed AI services/APIs

I customise AI models with my data

I add AI functionality to my apps via self-managed / local AI models

Low — Medium — High — Elite

Question wording: On average, how long does it take you or your team to restore service from an unplanned outage or service impairment? | Do you use or work with ML/AI models, tools, APIs, or services? If so, in which of the following ways?
% of developers in each DORA time to restore service performance group (n=5,886)

Challenges organisations face in software development projects

Involvement in AI-related activities by each change failure rate performance cluster

I use AI-assisted development tools
(e.g. GitHub Copilot, Testim, Bugasura)

I use AI chatbots for answers to coding questions
(e.g. ChatGPT)

I add AI functionality to my apps
via fully-managed AI services/APIs

I add AI functionality to my apps
via self-managed / local AI models

I customise AI models with my data

I don't use or work with ML/AI models, tools, or services

Question wording: On average, what percentage of changes you or your team deploy to production lead to service impairment/outage and require remediation (e.g. a hotfix, rollback, or patch)? | Do you use or work with ML/AI models, tools, APIs, or services? If so, in which of the following ways? % of developers in each DORA change failure rate performance group (n=5,744)
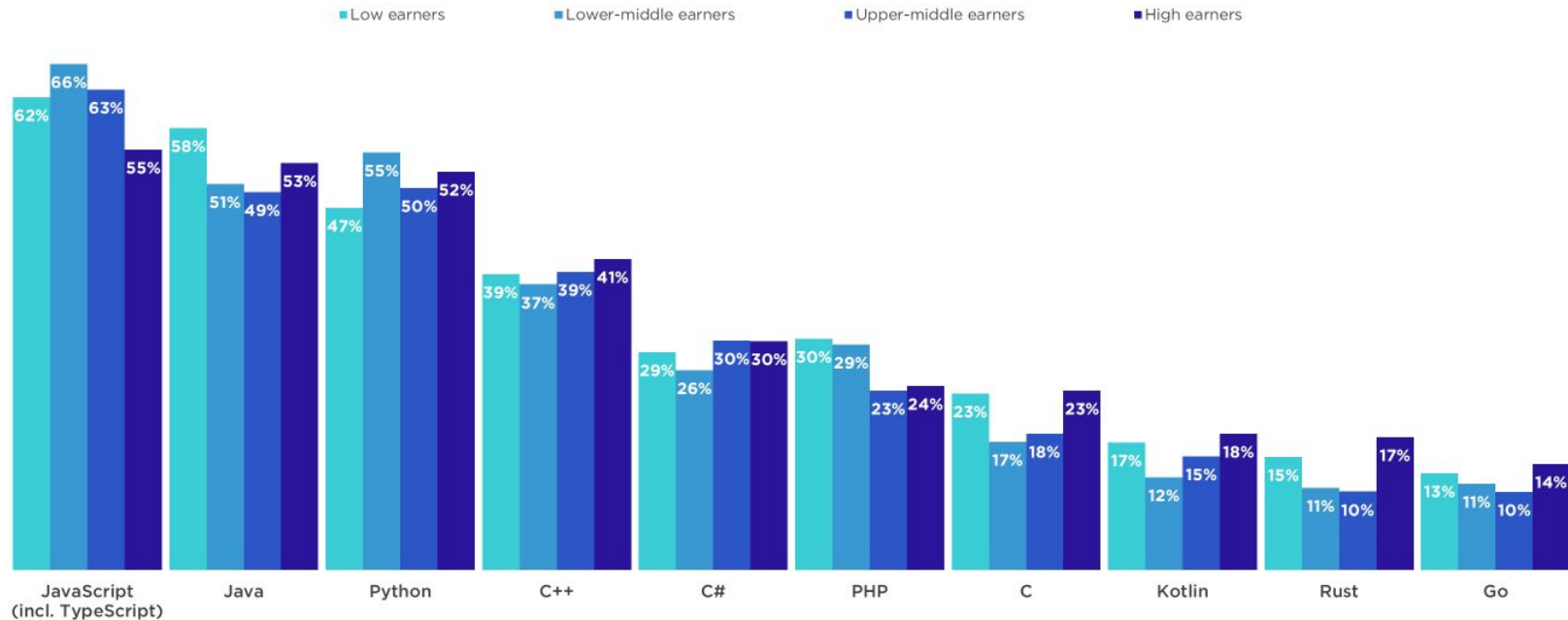
Challenges organisations face in software development projects

DORA metric groupings

	Elite	High	Medium	Low
Lead time for code changes *On average, how long does it take you or your team to go from code committed to code successfully running in production?*	Less than 1 day	1 day to 1 week	1 week to 1 month	More than 1 month
Deployment Frequency *On average, how often do you or your team deploy code to production?*	On-demand or at least once per day	Less than once per day, at least once per month	Less than once per month, at least every six months	Less than once every six months
Time to restore services *On average, how long does it take you or your team to restore service from an unplanned outage or service impairment?*	Less than 1 hour	1 hour to 1 day	1 day to 1 month	More than 1 month
Failure rates *On average, what percentage of changes you or your team deploy to production lead to service impairment/outage and require remediation (e.g. a hotfix, rollback, or patch)?*	<15%	16-30%	31-45%	>46%

Sizing programming language communities

Language usage by regionally-normalised income quartile

■ Low earners   ■ Lower-middle earners   ■ Upper-middle earners   ■ High earners

JavaScript (incl. TypeScript): 62%, 66%, 63%, 55%
Java: 58%, 51%, 49%, 53%
Python: 47%, 55%, 50%, 52%
C++: 39%, 37%, 39%, 41%
C#: 29%, 26%, 30%, 30%
PHP: 30%, 29%, 23%, 24%
C: 23%, 17%, 18%, 23%
Kotlin: 17%, 12%, 15%, 18%
Rust: 15%, 11%, 10%, 17%
Go: 13%, 11%, 10%, 14%

% of professional developers working for organisations with at least two employees in each income group (n=6,494)

developer nation
MEETUP

Community Updates

4th developer nation
Virtual Meetup
26, JUNE 2025

Affiliate Program

🤝 **Join the Developer Nation Affiliate Program - For Every Developer Who Wants to Make an Impact**

💸 **Earn rewards** by sharing the Developer Nation global survey - every voice counts!

🗣️ **Empower** other devs to speak up about the tools, tech, and trends that matter to them

🎁**Invite your peers to join awesome prize draws** for exclusive gear, AI tool credits, and more!

https://developernation.net/survey/affiliate/

_____

Whether you're running a blog, podcast, newsletter, or Discord server -
if you speak dev, this is for you.

Affiliate Program

https://developernation.net/survey/affiliate/

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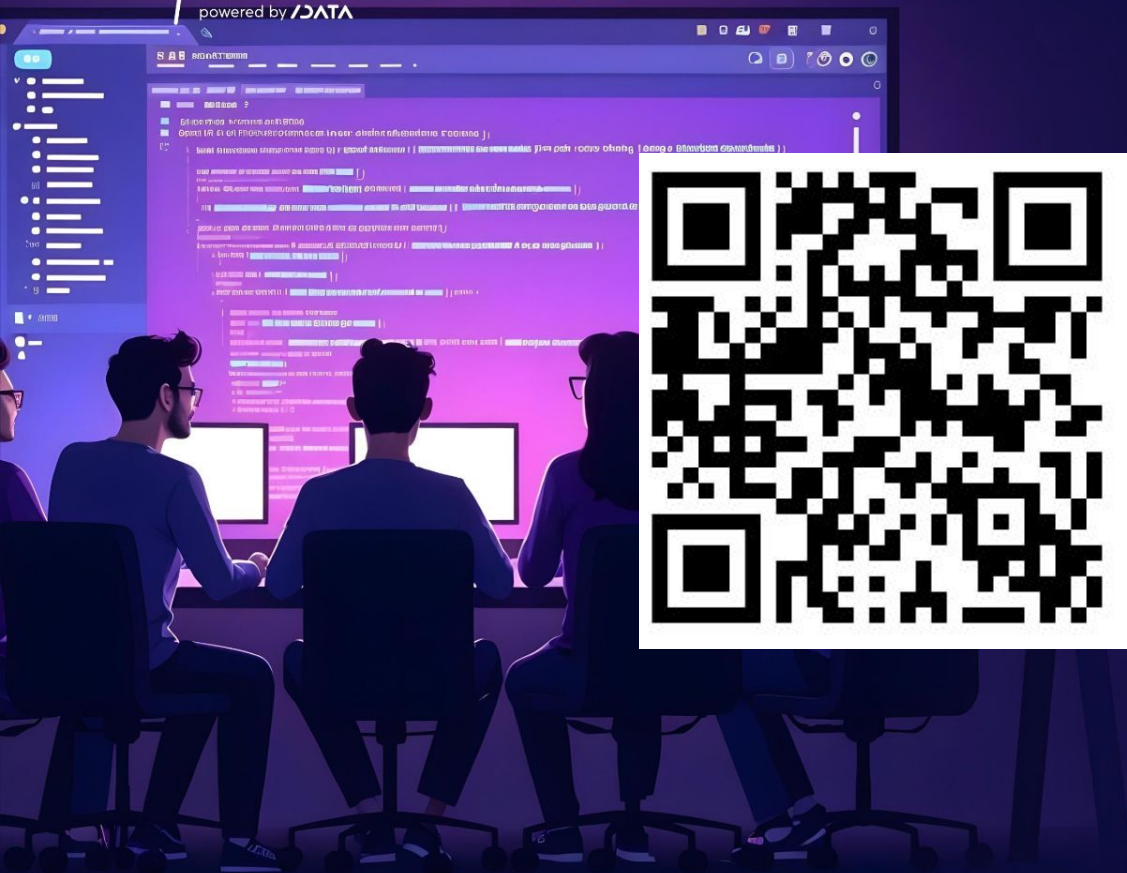
The Developer
Nation Community

WhatsApp channel

- Subscribe only channel
- Get Latest Updates without pings
- Personal details not visible to us or other members

Premium prizes

Licenses, accessories & swag

logitech MX MASTER 3S

Keychron

TESLA BOX

BenQ ScreenBar

Udemy $25

$5

$20

$10

Exclusive community prizes
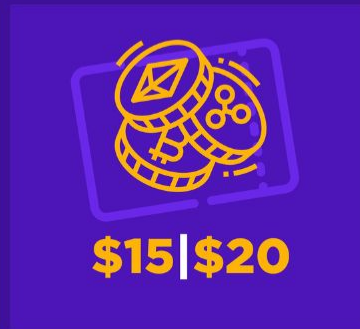
"The questions were insightful. I found myself thinking why my organization has selected certain tools and not others, questioning our very foundation as a company"

"They have made me rethink many aspects of my day-to-day work, especially related to AI"

Who we're supporting

freeCodeCamp(🔥)

"freeCodeCamp is a proven path to your first software developer job."

charity: water

"1 in 10 people lack access to clean water. We're on a mission to change that."

OSMI

"Open Sourcing Mental Illness (OSMI) is a nonprofit dedicated to raising awareness and providing resources for mental health in the tech community."

May 01, 2025

The developers behind generative AI applications

May 01, 2025

How and why developers engage with emerging technologies

May 01, 2025

Usage of AI assistance between DORA performance groups

May 01, 2025

How technology practitioners use social media

May 01, 2025

Sizing programming language communities

May 01, 2025

Challenges organisations face in software development projects
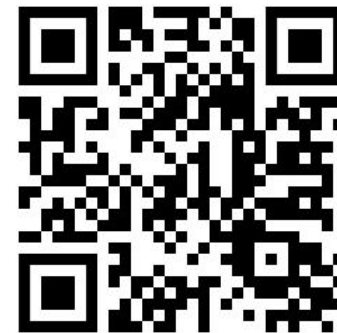
developer nation
powered by DATA
🤝
Keychron

How to Win

1. Participate in 30th Developer Nation survey using this specific URL(shared in chat) or QR code on the left

2. 2. Fill a small form using link(shared in chat) or QR code on the right

3. 3. Winners will be announced on 30th June on forum and whatsapp channel

Take the Survey

🎯 Instructions PDF: **https://shorturl.at/uDtFY**

Fill this form

developer nation MEETUP

THANK YOU

LIVE PRIZE DRAW

4th developer nation Virtual Meetup

Behind the Code
Org Challenges, DORA Metrics & the AI Effect

26, JUNE 2025

🕐 15:30, UK time

DN Custom Keychron Mechanical Keyboard

/DATA