

Staying relevant in the age of AI

How AI is reshaping Software Engineering



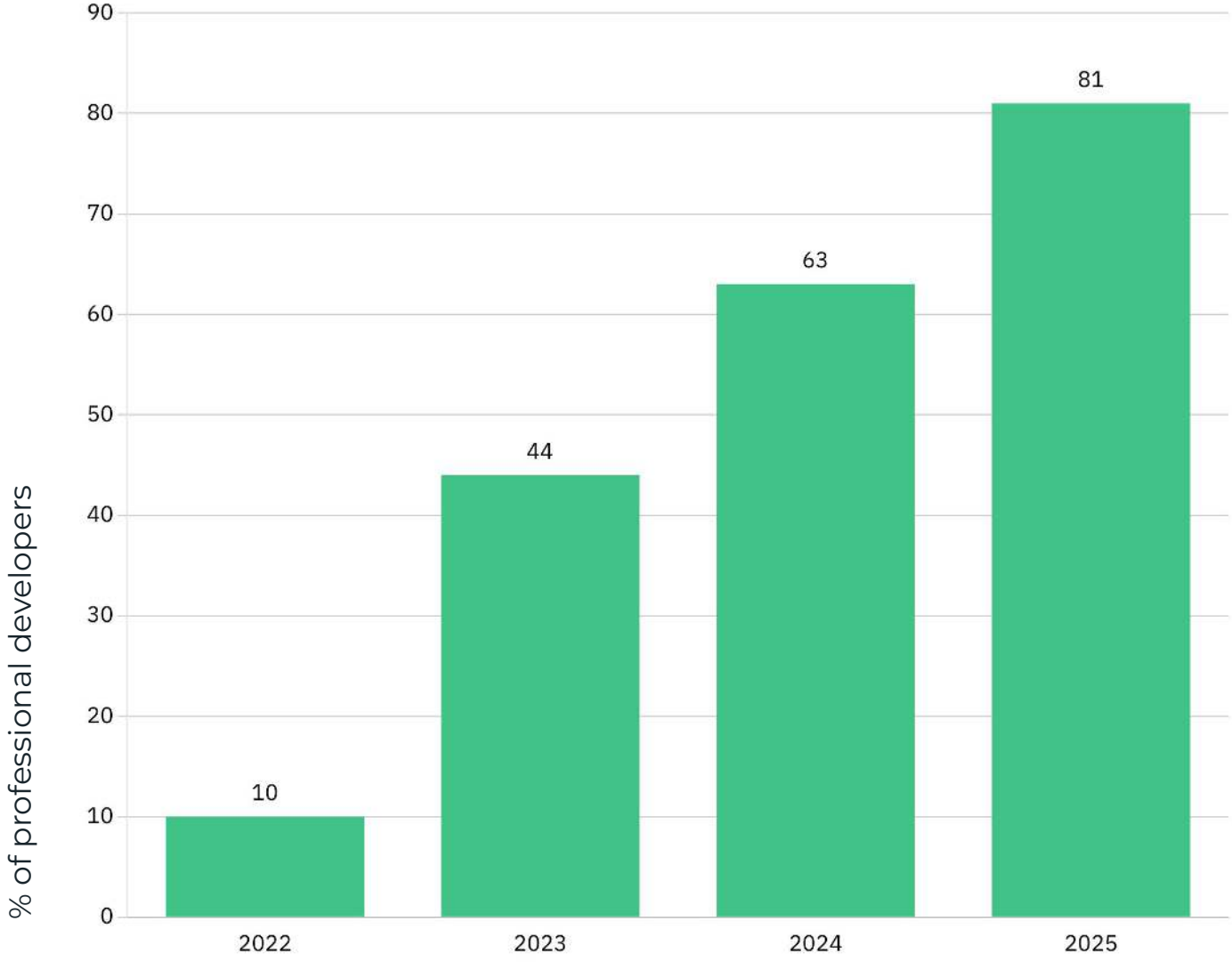
Kabisa

Software Artisans



**AI is rapidly reshaping
software engineering**

Use of AI tools in development process



Source: <https://survey.stackoverflow.co/>

Vibe coding

"It's not really coding - I just see things, say things, run things, and copy-paste things, and it mostly works."



Business Tech News: Zuckerberg Says AI Will Replace Mid-Level Engineers Soon

By [Gene Marks](#), Contributor. © I write about tech that impacts my small busin...

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Published Jan 26, 2025, 07:00am EST, Updated Jan 28, 2025, 01:36pm EST

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Mark Zuckerberg, CEO of Meta (Photo by Alex Wong/Getty Images)
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Elon Musk says AI has taken hard work out of coding, predicts seismic shift in tech jobs

Elon Musk predicts AI will transform coding jobs, making software writing more like recreational painting than a functional task, as it has already removed much of the drudgery involved.

Aman Gupta

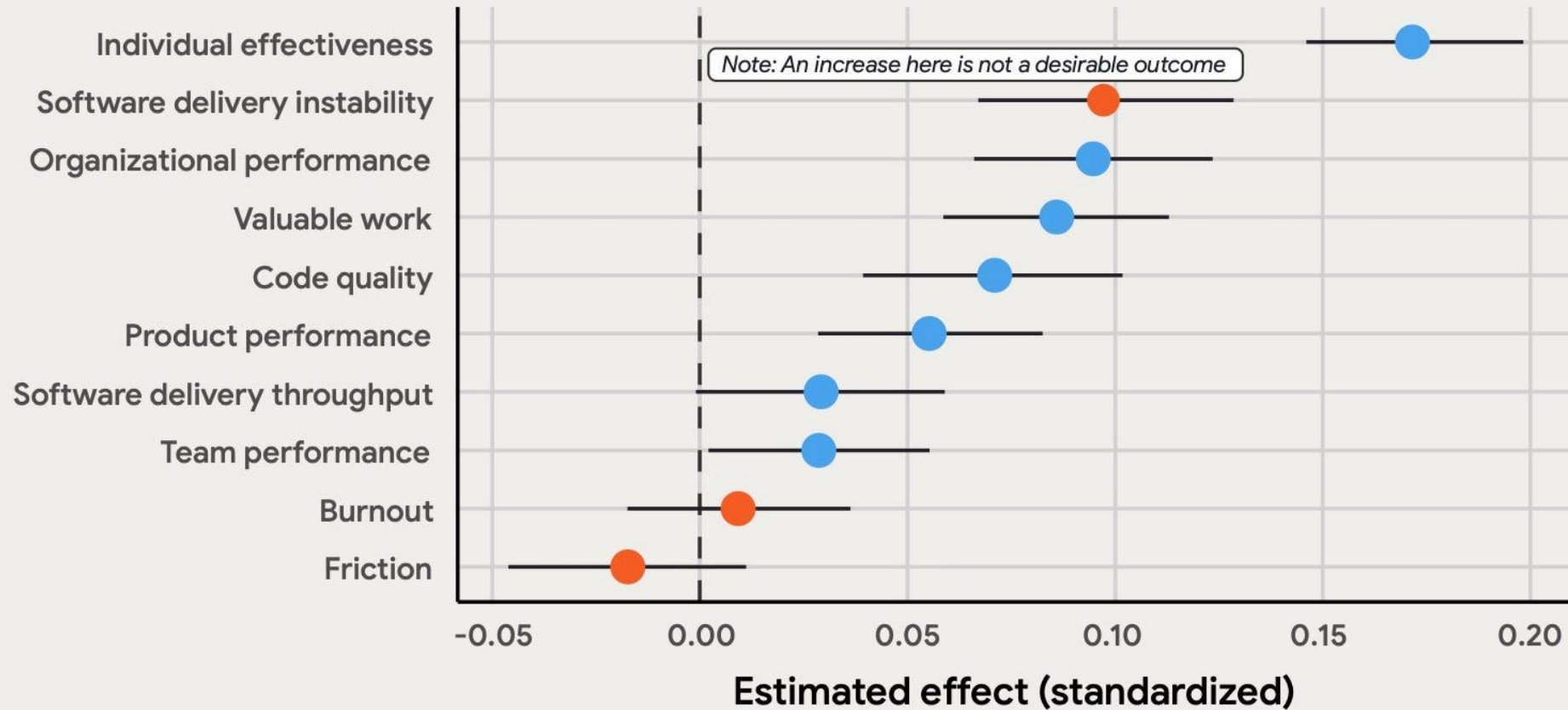
Updated • 4 Aug 2025, 08:58 AM IST



Elon Musk has predicted coding will become a recreational job in the future.(REUTERS)

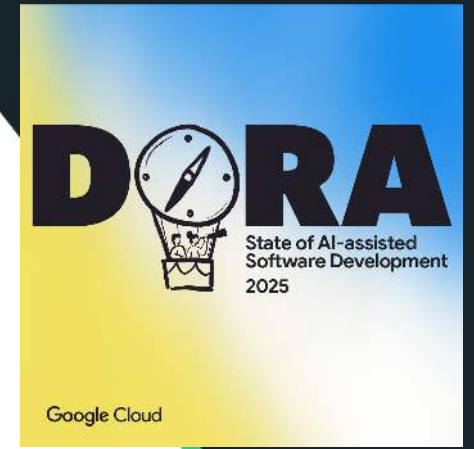
The landscape of AI's impact

Estimated effect of AI adoption on key outcomes, with 89% credible intervals



For outcomes in orange, such as Burnout, a negative effect is desirable.

Figure 28: The landscape of AI's impact





**AI is rapidly reshaping
software engineering**

How do *you* stay relevant?



**How to *safely* adopt AI in your
organization?**

\$ whoami



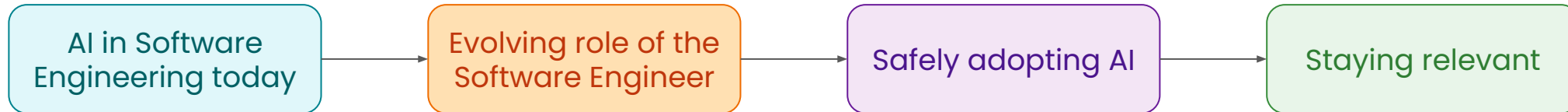
Pascal Widdershoven

CTO @ Kabisa

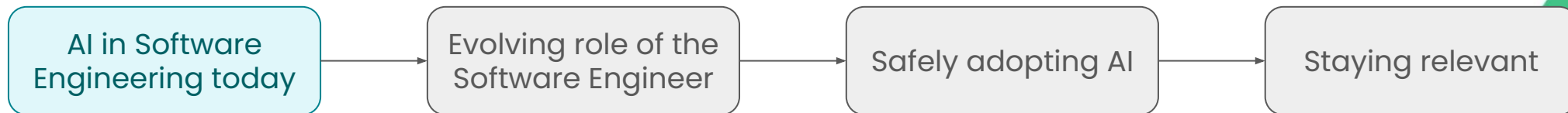
Software engineer & architect

Staying relevant in the age of AI

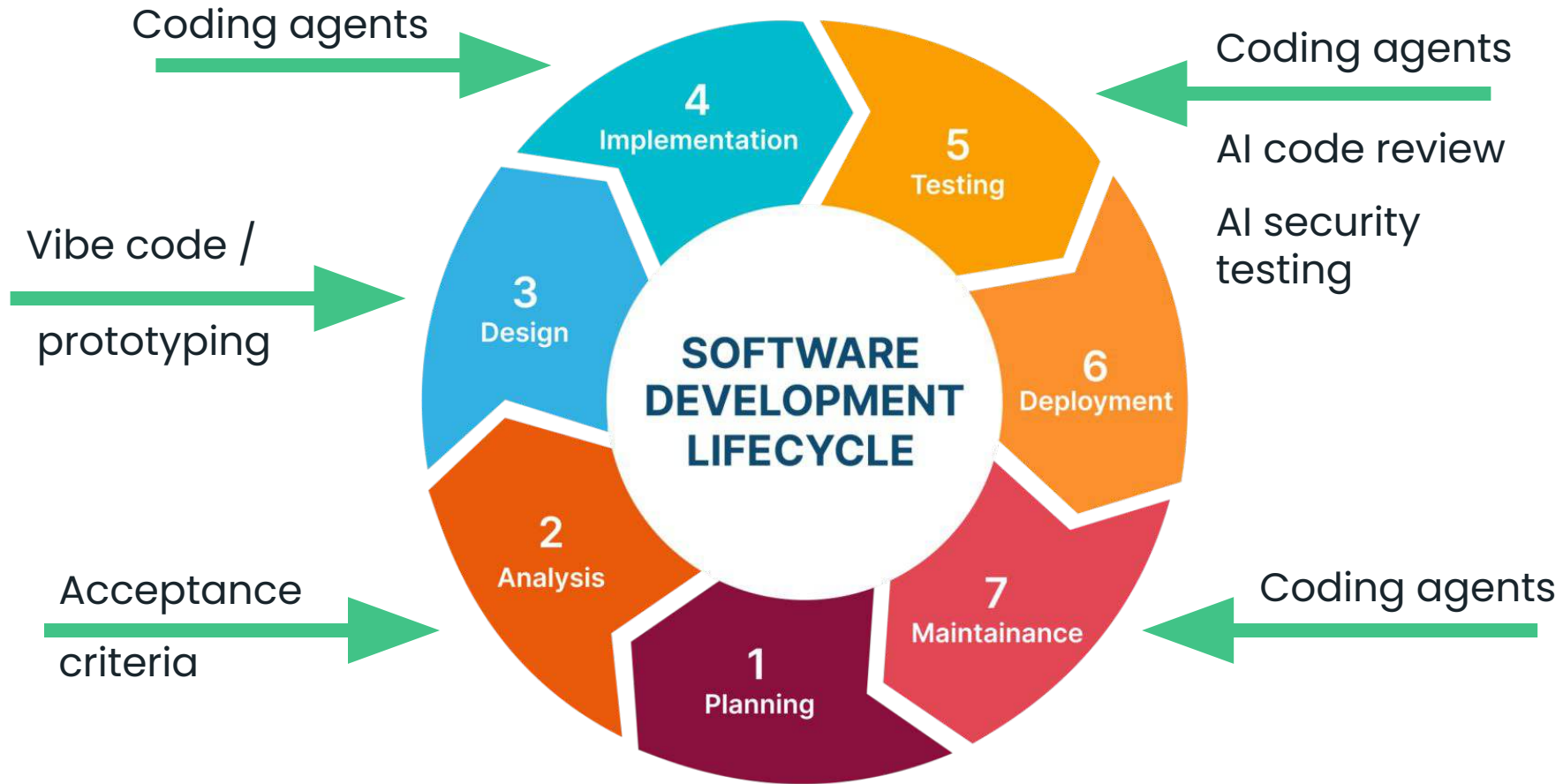
How AI is reshaping Software Engineering



Software engineering with AI today

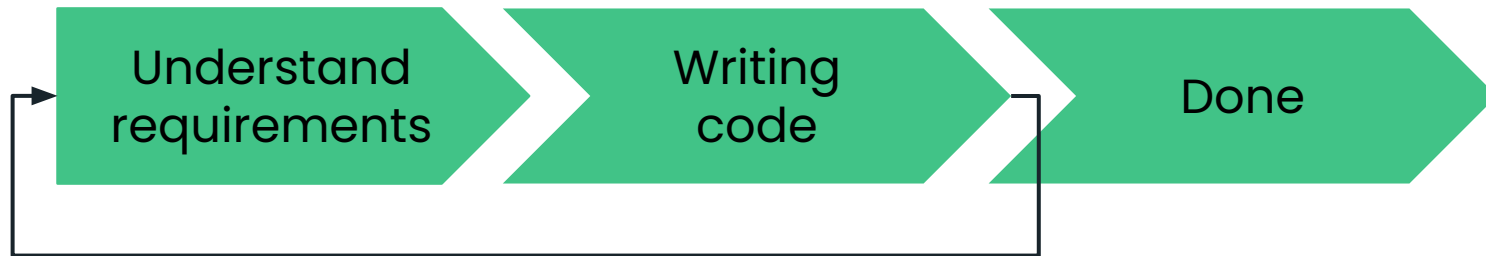


The Software Development Lifecycle



Traditional coding workflow

Developers manually writing code



AI Coding Agents

State of the art coding agent workflow



AI Coding Agents

State of the art coding agent workflow



- Developer sets goal & constraints for the agent.
- Instruct agent on tool use.



"We're going to implement full-text search for the knowledge base content. Details in <Ticket-URL>. I want to use Postgres FTS. Implementation should be generic, we need FTS for other data later as well."

AI Coding Agents

State of the art coding agent workflow



- Developer sets goal & constraints for the agent.
- Instruct agent on tool use.



*"I need to implement full-text search.
Let's explore ways to implement this."*

AI Coding Agents

State of the art coding agent workflow



- Agent gathers context.
- Chat back and forth.



- *Reads AGENTS.md*
- *Reads user story.*
- *Examines code base.*
- *Performs web search.*

AI Coding Agents

State of the art coding agent workflow



AGENTS.md

- Functional project overview
- Technology stack
- Project structure
- Coding style
- Testing approach
- Verification commands

AI Coding Agents

State of the art coding agent workflow



- Agent drafts implementation plan.
- Libraries, refactorings, new constructs, etc.

AI Coding Agents

State of the art coding agent workflow



Example plan

- Adding library X
- Create unit/integration tests
- Creating modules Y and Z
- Refactor A
- Change B

AI Coding Agents

State of the art coding agent workflow



- Agent starts coding step by step.
- Run commands, write code, lookup documentation.
- Developer reviews and intervenes.
- Agent can automatically verify.

AI Coding Agents

State of the art coding agent workflow





AI Coding Agents

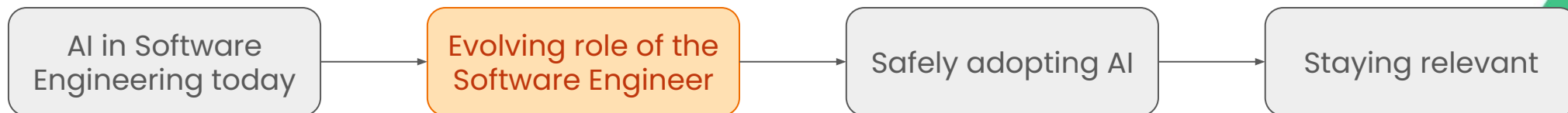


AI Coding Agents

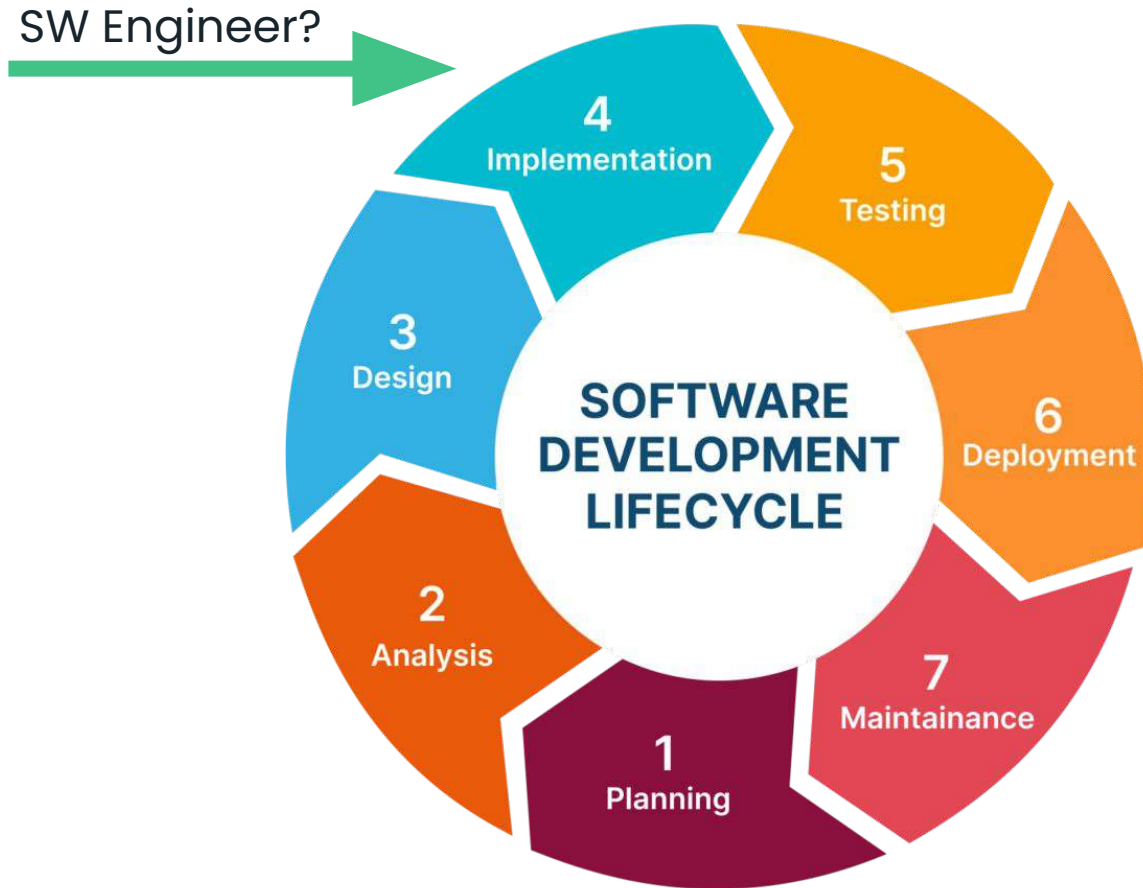
Recap & challenges

- Coding agents fundamentally change developer workflows. From read-think-write to design-delegate-verify.
- Working with coding agents has a steep learning curve.
- Coding agents require careful human guidance and oversight.
- **Developers must remain in charge** and **fully responsible for the output.**

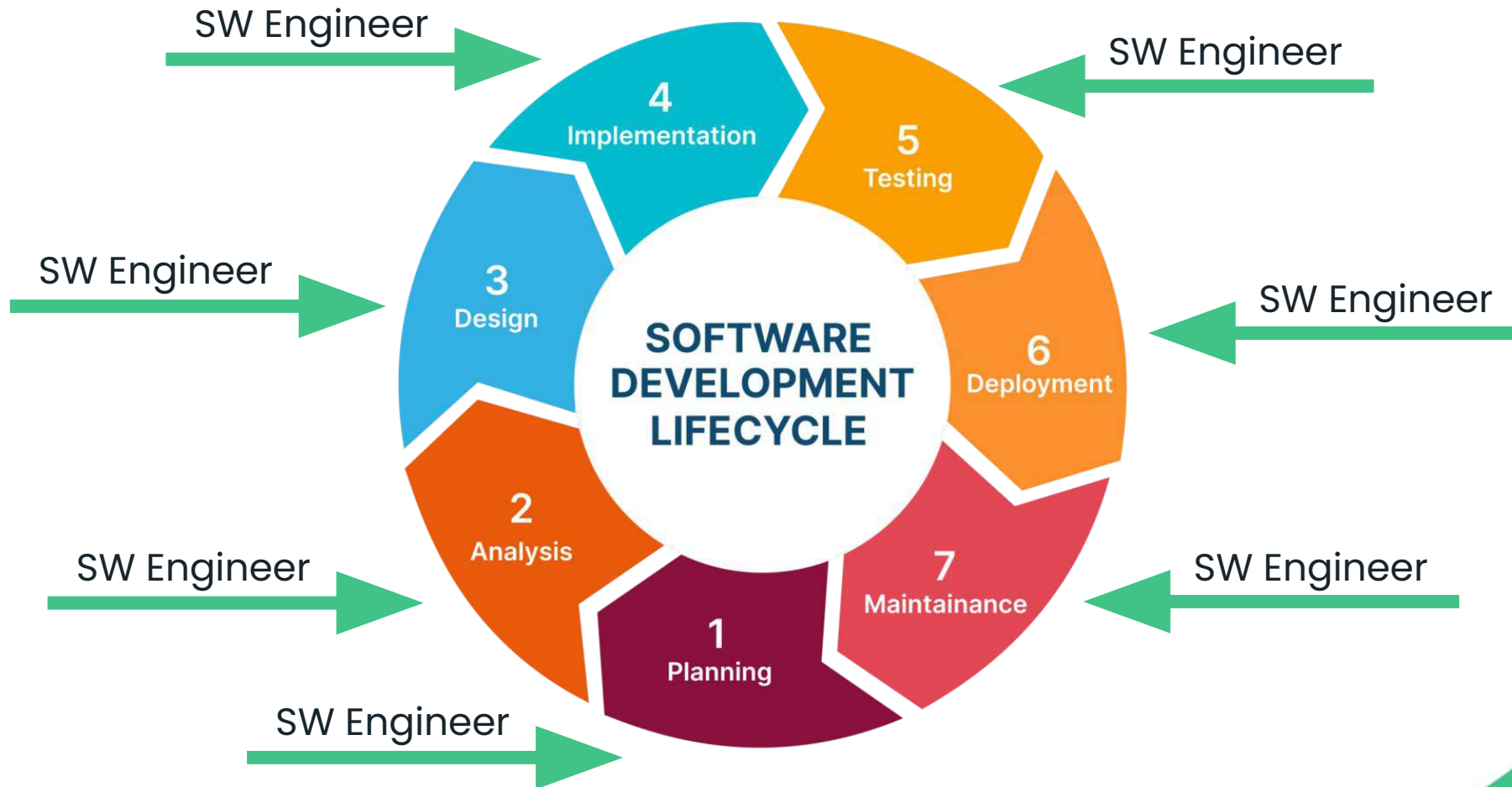
The evolving role of the Software Engineer



Role of the Software Engineer



Role of the Software Engineer

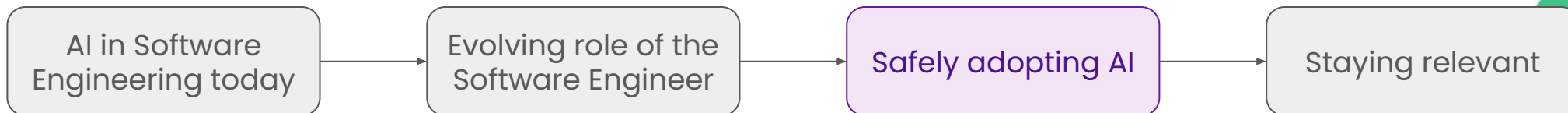


The Software Engineer

In the AI era

- From 'writer of code' to 'end-to-end problem solver'
- Spans a much larger part of the SDLC
- Becomes a Project Manager of sorts
- Uses deep technical experience to guide AI to success
- Jumps in where AI gets stuck
- New opportunity: AI Engineering

Safely adopting AI



(Safely) adopting AI assisted engineering

In your organization

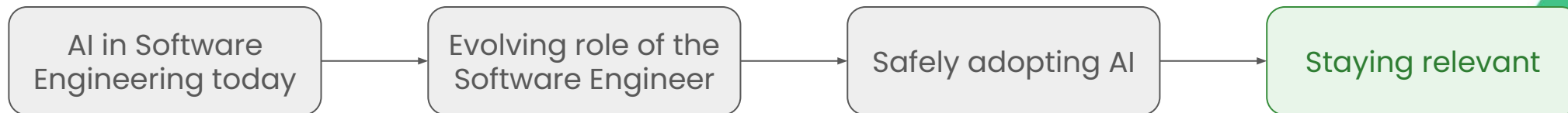
0. Ensure proper DevOps practises.
 - a. Automated testing (unit, integration, static analysis, security)
 - b. Human (!) code reviews
 - c. Continuous integration / fast feedback loops
 - d. Documentation

(Safely) adopting AI assisted engineering

In your organization

1. Enable teams to experiment.
2. Set up clear guidelines for responsible AI use.
3. Resist cognitive laziness and monitor team happiness.
4. Share share share!

How do **you** stay relevant in the age of AI?



Staying **relevant** in the **age of AI**

1. **Embrace it.** Learn, experiment, adapt.
2. **Be(come) a problem solver.** Software is your tool.
3. **Stay in charge.** Don't let AI take control.
4. **Enjoy the ride!** Interesting times are ahead.

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