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Thoughtworks Technology Radar's 30th Edition Highlights Teams Leveraging AI Across Software Delivery Lifecycle

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CHICAGO--(BUSINESS WIRE)--Apr. 3, 2024-- Thoughtworks (NASDAQ: TWKS), a global technology consultancy that integrates strategy, design and engineering, today released volume 30 of the Technology Radar, a biannual report informed by Thoughtworks' observations, conversations and frontline experiences solving its clients' most complex business challenges.

This press release features multimedia. View the full release here: https://www.businesswire.com/news/home/20240403635733/en/

The report notes the growing impact of generative artificial intelligence (GenAI) on software delivery, highlighting how a new wave of AI tools have the potential to give engineering teams a boost, augmenting their capabilities and improving outcomes.

These tools do much more than code generation; they can help with other facets of the software development lifecycle including testing, documentation creation and even refactoring. However, Thoughtworks notes that this space is still maturing — engineering teams need to remain vigilant and pragmatic in how they use these emerging tools.

"GenAI tools have the capacity to help software engineering teams in many different ways — they're more than coding assistants," said Rachel Laycock, Chief Technology Officer, Thoughtworks. "These tools can greatly impact technical problem-solving, and although risks need to be properly managed, it's nevertheless an area business leaders need to explore and invest in to gain a competitive advantage."

Highlighted themes in Technology Radar volume 30 include:

- **AI-assisted software development teams:** AI-assisted tools like GitHub Copilot, CodiumAI, aider and Continue influence almost every aspect of the software development lifecycle. Amid the excitement of GenAI's potential impact, effective engineering teams should focus on software quality and security by keeping non-developers aware of potential hazards.

- **Open-ish source licenses:** New licensing models are hindering the open source software ecosystem; there is an increasing trend of putting core functionalities and features behind paywalls. Technologists need to pay close attention to the details of the licenses of products they use and ensure all files in a repository are covered.

- **Dragging pull requests (PRs) closer to proper continuous integration (CI)**: Pull requests are often viewed as synonymous with peer review in the software development process. Although valuable in some contexts, they can also disrupt developer flow and hamper the speed of software delivery. A number of tools that feature on this Radar attempt to alleviate this challenge and make pull requests smoother and as frictionless as possible. Although Thoughtworks still sees continuous integration (CI) as the preferred practice for managing code, for organizations that can't use CI it's particularly important to explore new methods of improving the accuracy and speed of integration, especially if coding throughput continues to increase due to the adoption of coding assistants.

- **Emerging architecture patterns for large language models (LLMs)**: Patterns are popular in the technology world because they provide a succinct name for a useful solution within a particular problem context. With the growing use of LLMs, we are starting to see the emergence of specific architecture patterns to support common contexts. For example, we discussed NeMo Guardrails, which allows developers to build governance policies around LLM usage.

"Thoughtworks Technology Radar is driven by the deep passion we have around sharing the insights we've gained on how technology is evolving and our assessments on tools, techniques and frameworks based on our real world experience," said Dr. Rebecca Parsons, Chief Technology Officer — Emerita, Thoughtworks. "Thus it's most opportune that the 30th edition highlights the 'team sport' that software development is and has been for decades."

Visit www.thoughtworks.com/radar to explore the interactive version of the Radar or download the PDF version.

Supporting resources:

- Learn more about the macro trends in the tech industry this edition of the Technology Radar illustrates.
- Read Thoughtworks CTO Rachel Laycock's perspective on Technology Radar reaching volume 30.
- Keep up with Thoughtworks news by visiting the company's website.
- Follow us on Twitter, LinkedIn and YouTube.

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About Thoughtworks

Thoughtworks is a global technology consultancy that integrates strategy, design and engineering to drive digital innovation. We are over 10,500

people strong across 48 offices in 19 countries. For 30 years, we've delivered extraordinary impact together with our clients by helping them solve complex business problems with technology as the differentiator.

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