Skills for days: why now's the time to optimise your tech teams for AI

Hywel Carver, cofounder and CEO of Skiller Whale, a live coaching platform for engineering teams, says AI tools can cause real damage in the wrong hands.

At the recent London Tech Week, Prime Minister Rishi Sunak _urged technology companies to capitalise on the opportunities_ presented by AI. That sentiment was echoed by Clare Barclay, CEO of Microsoft UK, _who said that generative AI_ "will be the most significant inflection point in our lifetimes", fueling the next industrial revolution.

Technology leaders understand the potential of AI. But they're impeded by insufficient infrastructure, limited organisational understanding of the technology, and a global skills gap that shows no sign of abating. _According to Lightcast_, the demand for AI skills in this country has more than tripled over the past decade. No wonder then that _IBM found_ only 26% of IT professionals say their organisations are using the technology in the UK, versus 60% of those in China and India.

A double-edged sword

The sector's pace of change has never been faster. But, faced with a skills crisis and dwindling hiring budgets because of market conditions, leaders need to think innovatively about how they keep up. They're under pressure to do more with less, raise the productivity of their teams, and launch products faster

without adding to headcount. The answer doesn't just lie in AI tools but in also upskilling the current workforce to harness them in the right way.

Done right, AI can accelerate software development and product testing. It can help engineers write better code faster, and debug applications more efficiently. A _recent Forrester survey_ found engineers working with AI tools are more productive and creative, with better product and testing insights. They're also better able to predict the time to market for new products and have improved retention rates. Overall, organisations that have incorporated AI into their engineering workflows are 43% more likely to see an increase in revenue, competitiveness, and profitability.

But if it's mismanaged, AI can introduce bugs, increase technical debt, and cause ethical, legal and security problems that are difficult to uncover and resolve.

Skills for the future

AI can't be blindly trusted – the potential for mistakes is too great. Software engineers need a deeper understanding of how LLMs work, the tasks they're good at, and what is best left to humans. Many are going to need very different skills as their roles evolve.

According to GitHub, the current top two daily tasks for development teams are writing code (32%) and finding and fixing security vulnerabilities (31%) – both of which LLMs such as Copilot are good at. In the future, developers will need higher value skill sets to write effective commands, analyse generated code and troubleshoot. GitHub's poll found developers believe, thanks to AI, they'll soon be spending more time on code and security reviews, planning, pair programming and solution design. And leaders will need to embrace the challenge of leading more complex but higher business impact initiatives.

That's going to require a different approach to professional learning and development. Often, software engineers that are given a budget for training are free to learn what they like. There's no cohesive team strategy to further the business's ambitions. Upskilling is largely left to chance on the job or outside of office hours. New skills are adopted slowly and may even be irrelevant.

In contrast, live team coaching focuses on the development of skills that align with a company's strategic goals. Technical experts run short, focused sessions, with individualised feedback to help engineers adopt a deep understanding of a new skill in weeks rather than years. Metrics such as cycle time, speed to market and revenue, all start to improve.

Empowering a future workforce

AI tools can only take an organisation so far. Harnessing this technology to innovate at scale also requires a skilled workforce. One that is empowered with higher value skills to do their best work.

The future of AI is exciting. But before leaders incorporate the latest shiny tool into their workflows, they need to ask themselves whether their teams are prepared. In the wrong hands, AI can do more harm than good. The right learning approach will help organisations flex and thrive in the future – a future which is approaching fast.

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