

AI Boosts Productivity in Australian Tech Jobs Without Reducing Workforce

August 16, 2025

— Categories: Economics



A new analysis reveals that artificial intelligence (AI) is significantly enhancing productivity among Australian technology professionals, including software developers, computer systems analysts, and network architects, without causing widespread job losses. The findings suggest that AI will help streamline tasks and allow workers to focus on strategic, creative, and innovative responsibilities.

The study, conducted by Pearson, examined the impact of 34 emerging technologies across 76,600 workplace tasks. It found that by 2030, tech professionals could save between 4.5 and 7 hours per week by using AI to automate repetitive work. Craig McFarlane of Pearson emphasized the importance of “role redesign” to leverage existing talent effectively and close skills gaps. By integrating AI tools, professionals can concentrate on higher-value tasks that require human judgment, creativity, and strategic thinking.

The report highlights that AI adoption is not limited to tech roles. Industries such as finance, healthcare, mining, retail, and logistics are redesigning positions to unlock workforce capacity and improve efficiency. In education, institutions like St Mary MacKillop College in Melbourne are piloting generative AI tools to support student learning and teacher planning. These tools provide feedback, aid research, and enhance lesson delivery, all while promoting ethical use and critical thinking.

Developers and educators stress that AI is intended to supplement, not replace, human work. By handling routine or time-consuming tasks, AI allows professionals to increase productivity without threatening employment. This approach also addresses workforce shortages and reduces stress on employees, particularly in sectors like education where high workloads are common.

The Australian Services Union (ASU) is advocating for a nationwide AI training initiative to ensure workers can adapt to the changing technological landscape. Research indicates that 84% of employees have not received formal AI training despite having some knowledge of the tools. ASU National Secretary Emeline Gaske called for publicly

funded, accredited programs that enhance AI literacy and facilitate career transitions. The union also emphasized the need for fair work practices, including shorter workweeks and increased base pay, to reflect the growing value of human skills such as judgment, problem-solving, and teamwork.

The analysis underscores that successful AI integration depends on combining technological adoption with workforce development. Providing training, redefining roles, and creating supportive workplace policies ensures that AI benefits both employees and employers. It also demonstrates that technological advancement does not inherently lead to job displacement but can serve as a catalyst for productivity, innovation, and professional growth.

Analysts note that these findings are particularly relevant as Australia and other nations navigate the rapid expansion of AI across multiple sectors. By preparing employees through training and strategic role redesign, the workforce can embrace AI as a tool for empowerment. These efforts can help maintain competitiveness, foster innovation, and ensure sustainable growth in the digital economy.

Ultimately, the report highlights a future where AI and human workers collaborate effectively. Properly implemented, AI enhances efficiency and creativity, strengthens workforce capabilities, and allows Australians to take full advantage of emerging technologies without sacrificing job security.