THE HONG KONG POLYTECHNIC UNIVERSITY DEPARTMENT OF MANAGEMENT AND MARKETING

Departmental Research Seminar



AI Exposure on Workers' Career Path: Evidence from U.S. Workforce By

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Date: 4 Jun 2025 (Wed) Time: 10:30 am - 12 noon Venue: Online via Zoom

Abstract

We analyze workers' career paths after being exposed to artificial intelligence (AI) in the workplace. We find that AI exposure has a positive impact on employees' future salary and promotion: After controlling other factors, employees being exposed to AI is, on average, associated with a roughly 50% increase in salary and a 1-level increase in seniority in 5 years. More importantly, we find a divergent impact of AI exposure on employees with different seniority levels. For employees whose seniority level is high when exposed to AI, their future salary and seniority will increase compared to those not being exposed, while for junior employees, these will decrease. Our mechanism tests show that although AI in the workplace can benefit senior employees by complementing their domain knowledge, AI may also hinder junior employees from picking up domain knowledge. These results provide new implications for the digital divide in the AI era.

Prof. Guohou Shan is currently an Assistant Professor at D'Amore-McKim School of Business at Northeastern University. His current research focuses on examining the impact of adopting fact-checking, artificial intelligence (AI), and digital nudges on user behavior. Prof. Shan's papers have been published in Information Systems Research, Production and Operations Management, Journal of Applied Psychology, Decision Support Systems, Information & Management, IEEE Transactions on Information Forensics and Security, IEEE Transactions on Computational Social Systems, etc.

Prof. Shan currently serves as an editorial member for the *Journal of the Association for Information Systems* and the *Journal of Database Management*. Prof. Shan also served on the program committee for CIST 2025, as mini-track chair for HICSS 2024-2025, and for AMCIS 2024-2025.

All interested are welcome.

