Title: Adoption of Artificial Intelligence in Auditing

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Area: IS & Finance and Accounting

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Abstract:

Increasing adoption of Artificial Intelligence (AI) is likely to transform the audit profession. Our study investigates the factors influencing the adoption of AI specifically in audits. Using the Technology-Organisation-Environment (TOE) framework (Tornatzky and Fleischer, 1990) as a broad theoretical anchor for data analysis, we investigated the influence of technological, organisational, and environmental factors on the adoption of AI in auditing. We conducted 28 semi-structured interviews with audit partners and managers, standard setters, IT specialists and managers from professional bodies.

Our research identifies several technological (perceived benefits, compatibility, maturity), organisational (readiness, data quality, trust) and environmental (audit standards, regulation, client readiness) factors influencing the adoption of AI tools in audit practice. Whilst AI has the potential to improve audit quality and deliver value-adding services to audit clients, our study concludes that AI adoption requires a rethink of audit practice considering the perceived lack of control in AI 'black-box' potentially rendering audit practice even more hidden from view and exposed to increased scrutiny over audit quality. Poor data quality, human bias that could be built into AI solutions and legal implications of financial auditing carried out using AI tools, and belief that AI tools cannot support tasks that require audit judgement and scepticism are found to be barriers, our study found.

Extending these findings, our study is currently investigating the use and potential effects of AI tools on deskilling, audit quality and professional identity using the theory of technology dominance (Arnold and Sutton, 1998). Initial findings suggest deskilling at the middle-level positions, changes to the professional boundaries and trust and that tendency to rely on AI varies based on self-confidence, explainability of the tool, and initial trust. AI may automate many low-level tasks previously undertaken by junior auditors and certain middle-level tasks with consequent deskilling. This deskilling effect, potential ability to create value-adding opportunities as well as erasure of boundaries between audit phases may have significant implications for professional bodies, higher education providers and regulatory agencies.

Note: This seminar paper is from an ongoing research project jointly carried out with Dr Angela Hecimovic at the University of Sydney Business School.

Speaker Profile:

Currently working as an Associate Professor in the University of Sydney Business School, Ravi teaches and researches in the field of technology adoption. He has 22 years of experience teaching in various business disciplines and 10 years of corporate consulting experience prior to joining the academe. His research explores evolving relationships between IT-enabled innovations and performance. His current research projects include influence of blockchain, artificial intelligence and digital transformation on business, work and professions; health analytics adoption in hospitals and information systems role in sustainability reporting. His research work, funded by grants (worth more than $400,000 so far), was published in several leading journals including Information & Organization, Information Systems Frontiers, Accounting

Auditing and Accountability Journal, International Journal of Auditing, Australian Journal of Management, Business Process Management journal and others.

He held and still holds several leadership roles in various national and international boards such as chairperson Supply Chain Council, and the Association of Information Systems Education committee and University of Sydney Research Ethics Committee and others. He is currently serving as non-executive director on the boards of three higher education providers in Australia and serves in the board of an Indian charity.

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