

# Nur Afiqah Najwa Binti Muhammad Arnim & Siti Noor Azmawaty Abd Razak

The auditing field is changing rapidly with advances in technology, moving to a tech-based environment that auditors need to be ready for. Processes of Audit are changing at an accelerating rate. This change is driven by enablers such as Artificial Intelligence (AI), Machine (ML) Blockchain, Robotic Learning Process Automation (RPA), Big Data Analytics and Cloud computing that have made the traditional audit process obsolete. In summary, utilisation of this technology can be defined as audit firms transitioning from traditional manual efforts to advance systems that in doing so increase the level of accuracy and provide a more complete informative set of audited information (Atanasovski & Trpeska et al., 2020). There is a shift in what the auditor role now looks like, and these coming technologies will necessitate different skills from auditors, constituting evolution professional to development that must take place.

One of the pressing issues in auditing today is job-displacement caused by technological advancements. such as data entry, reconciliation and even fundamental analysis can be handled by Automation or Al-driven tools without the requirement of human interference. According to research from the American Institute of CPAs (AICPA) and Chartered Institute of Management Accountants (CIMA), 50% of accounting work could be automated, which is significant streamlining concentrated on routine operations. Still, automation may replace some jobs with others.

The World Economic Forum estimates that AI and ML will result in the creation of 133 million new jobs but also displace about 75 million (WEF, 2020).

Besides, adopting advanced technologies in auditing entails significant financial investments. Technologies like AI, blockchain, and data analytics come with substantial initial costs, including purchasing, training, and maintenance expenses. Smaller firms may find these financial burdens challenging, potentially widening the gap between large and small audit firms in service capabilities. Research from Harvard Law School emphasizes that these investments are crucial for acquiring technology and ensuring auditors are adequately trained (Lindsay et al., 2019). The ongoing costs of maintaining and updating these technologies further challenge firms, requiring continuous investments to stay current with technological advancements.



#### **Recommendation:**

## **Incremental Technology Implementation**

Adopting a phased approach to technology implementation can help manage financial burdens and operational disruptions. Incremental implementation allows firms to integrate advanced systems like AI, data analytics, and blockchain in stages, assessing their effectiveness before committing to further investment. This approach enables firms to spread out costs and manage risks, providing auditors time to adapt to new systems and enhancing overall audit quality (Journal of Accountancy, n.d.).

## **Collaboration with Technology Providers**

Collaborating with technology providers is a strategic way for audit firms to manage costs while enhancing service capabilities. Partnerships with technology vendors allow firms to access advanced tools at reduced rates and tap into their technical expertise. These collaborations can lead to bespoke solutions tailored to audit firms' needs, facilitating smoother integration and improved efficiency (University of Illinois at Urbana-Champaign, n.d.).

### **Investment in Training and Development**

Investment in training and development is very important in that it is through this that the auditors will acquire essential skills that will aid them keep pace with changing technology. A constant system of engagement through the learning processes makes the employees of an organization better positioned to ensure that the organization is up to date and is able to implement IT breakthroughs. Organizations that emphasize on training as a strategy adopt new technology faster than their rivals and remain flexible in the fast-changing world of technology (Society for Human Resource Management, n.d.; World Economic Forum, 2020).

The auditing profession is experiencing a transformation driven by rapid technological advancements. Technologies such as AI, ML, blockchain, RPA, and big data analytics promise increased accuracy and efficiency in audits. However, adapting to these changes requires significant investment in training, new skills, and technological resources, posing financial challenges for audit firms. To navigate this landscape effectively, firms should adopt strategic approaches like incremental technology implementation, collaboration with technology providers, and continuous investment in training and development. By embracing innovation and proactive planning, audit firms can thrive in a technology-driven environment and deliver exceptional audit services.

#### References:

Atanasovski, A., Zorica, B. L., & Trpeska, M. (2020). Conceptual Framework for Understanding Emerging Technologies that Shape the Accounting and Assurance Profession of the Future. Repository of UKIM. http://hdl.handle.net/20.500.12188/9711

Gao, L., & Zhang, S. (2019). Information Technology and Auditing: The Impact of Technology on Audit Quality. Journal of Accounting and Economics.

Harvard Law School Forum on Corporate Governance. (2019). Emerging Technologies, Risk, and the Auditor's Focus. https://corpgov.law.harvard.edu/2019/07/08/emerging-technologies-risk-and-the-auditors-focus/

McKinsey & Company. (2021). Building the Internal Audit Function of the Future. https://www.mckinsey.com/capabilities/risk-and-resilience/our-insights/building-the-internal-audit-function-of-the-future/

Society for Human Resource Management (SHRM). (n.d.). Training and Development: Enhancing Employee Performance. SHRM Website.

World Economic Forum. (2020). The Future of Jobs Report 2020. World Economic Forum. https://www.weforum.org/reports/the-future-of-jobs-report-2020