



THE AWARENESS AND KNOWLEDGE ON ARTIFICIAL INTELLIGENCE AMONG ACCOUNTANCY STUDENTS

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ABSTRACT

Artificial intelligence (AI) has significantly influenced various sectors, including education, healthcare, politics, social, and the economy, yielding both positive and negative outcomes. According to Accenture's research on 12 developed countries, AI holds the potential to double annual economic growth by 2035. PricewaterhouseCoopers (PwC) suggests that global GDP could increase by up to 14% in 2030 due to AI. Given AI's pervasive role in daily life, it is crucial to regularly update awareness and knowledge about this technology. This study focuses on analyzing AI awareness and knowledge among accountancy students, aiming to foster their interest in AI. UiTM Tapah's accounting students were surveyed using questionnaires for data collection. Results indicate that accounting students possess moderate knowledge about AI but are generally aware of its impact. The study's findings offer valuable insights, contributing to the development of interest and knowledge, particularly among accounting students, in the realm of AI technology.

INTRODUCTION

In the context of the Fourth Industrial Revolution (4IR), transformative technologies like Artificial Intelligence (AI), Internet of Things (IoT), Cyber Security, and Unmanned Aerial Vehicles (UAVs) are reshaping daily work processes (Raska, 2019). Silfverskiöld et al (2017) emphasize that IoT plays a crucial role in enabling the development of Big Data and AI technologies. As society strives to keep pace with technological advancements, understanding AI's scope becomes imperative. Leitner-Hanetseder et al's (2021) Delphi study identifies cloud computing and blockchain as drivers in technologically empowered accounting, with AI-based tools like smart robots and business intelligence poised to replace human roles in the field. Conversely, Frey and Osborne (2017) highlight the susceptibility of hotel desk clerks to automation, exemplified by robot-staffed hotels such as Henn-na Hotel in Japan and Alibaba Future Hotel in China (Northfield, 2015).

Definition of Artificial Intelligence

In 1956, the founding figure of AI, John McCarthy, defined it as the scientific and engineering pursuit of creating intelligent machines. According to Smith (2020), artificial intelligence refers to a set of computer programs capable of either enhancing or potentially replacing human involvement and oversight in entire processes or specific segments. Smith further categorized AI into types such as computational AI, linguistic AI, spatial AI, reactive computing, limited memory, theory of mind, and self-awareness. Examples of AI technologies encompass face detection, text editors, social media platforms, chatbots, recommendation algorithms, and search algorithms. These AI applications find utility in diverse fields, including manufacturing, business,

medical sciences, defense security, transportation, law, and technology.

APPLICATION OF ARTIFICIAL INTELLIGENCE

Application in Accounting and Auditing

Neely and Cook (2011) foresee a significant impact of new technologies, particularly in AI, on the fundamental structure and processes within accounting. These advancements are poised to swiftly transform professional roles and task profiles. Software robots are anticipated to assume responsibilities in fraud detection and liquidity planning, enhancing the overall effectiveness of accounting organizations alongside existing technologies like enterprise resource planning and accounting information systems. In the auditing domain, AI is set to replace traditional methods, giving rise to E-Accounting Audit (Zakaria, 2021), facilitating processes such as recording, tabulating, posting, summarizing, and reporting for electronic and digital transactions. Furthermore, Hassan's (2022) examination of Big 4 accounting firms reveals a clear trend — the steady investment and integration of AI into key business processes, with the acknowledgment that the future success of accounting will be significantly influenced by AI. This emphasizes the importance for businesses, regardless of size, to stay abreast of technological advancements to remain competitive in the evolving landscape where accounting and technology converge.

Application in Defense Industry

Artificial Intelligence finds application in Unmanned Aerial Vehicles (UAVs), commonly known as drones, renowned for their widespread use in civilian and military contexts, especially in monitoring and surveillance. These UAVs, valued for their



rapid deployment, adaptable altitude, and versatility, provide features like high-resolution video or imagery, autonomous flight capabilities, and real-time data streaming, catering to a variety of applications (Barbosa et al., 2020). The UAV sector has experienced substantial growth, reaching a market value of US\$127.3 billion globally in 2019, according to PricewaterhouseCoopers (Rozaidee, 2019). Looking forward, the future trajectory of UAVs as mobile communication terminals holds potential for reliable and cost-effective applications in both civilian and military domains (Mozaffari et al., 2019).

Application in Healthcare Field

Machine learning, a subset of AI technology, plays a crucial role in the diagnosis and treatment planning process, contributing significantly to healthcare advancements (Lee et al., 2018). The application of AI has shown promise in enhancing diagnostic effectiveness, as highlighted by Dawes et al. (2017). Moreover, AI's utility extends to nursing and palliative care for cancer patients, providing essential constant monitoring, as emphasized by Schmidt-Erfurth et al. (2018). According to Ashwin and Muralidharan (2015), AI has the potential to streamline the diagnosis, treatment, and overall care of patients. Assessing awareness and knowledge in this domain, Samyuktha et al. (2020) reported a generally positive response from medical and healthcare professionals, with 92% expressing belief in AI as the future of medicine. The study concluded that participants possessed a moderate level of knowledge about AI and its scopes, indicating room for improvement in understanding and application.

Application in Higher Education Sector

AI and robotics have the potential to revolutionize education, reshaping the learning process, redefining the roles of educators

and researchers, and transforming the operations of universities as institutions (Cox, 2021). In the educational landscape, AI tools like Intelligent Tutoring Systems (ITS) have been introduced to deliver course content in a step-by-step manner. Additionally, Automatic Writing Evaluation (AWE) tools, including Grammarly, QuillBot, and Turnitin's Revision Assistant, assess and provide feedback on writing styles. Winkler and Sollner (2018) highlight the use of conversational agents, also known as Chatbots or virtual assistants, as AI tools that facilitate both short-term and long-term interactions. These agents can serve as tutors, engage in language practice, answer questions, promote reflection, or even function as co-learners.

AI Innovation Ecosystem (AI-IE) Model in Malaysia based on Quadruple Helix Approach

The success of AI relies on a robust, purpose-driven, and open-data ecosystem. In pursuit of this goal, the Malaysian Government, in collaboration with the National Tech Association of Malaysia (PIKOM) and Microsoft Malaysia, has initiated the development of the AI Innovation Ecosystem (AI-IE) model. This model adopts a quadruple helix approach, emphasizing participation and collaboration. The key consideration is aligning AI advancements with Malaysia's socioeconomic drivers, showcasing how these applications can create demand and foster improvements in industries and services for the broader community. Every industry stands to benefit from AI, and the onus lies on organizational leaders to tailor its implementation to their unique contexts. Another crucial factor is the industry itself, identifying those capable of supplying AI technology and expertise. While established companies in the AI sector offer cutting-edge services, collaborating with startups is equally vital. Startups serve as hubs for innovation, playing a significant role in reshaping economies (Dzaharuddin, 2021).

RESULTS AND FINDINGS

Figure 1: People's opinions on future behaviors of artificial intelligence

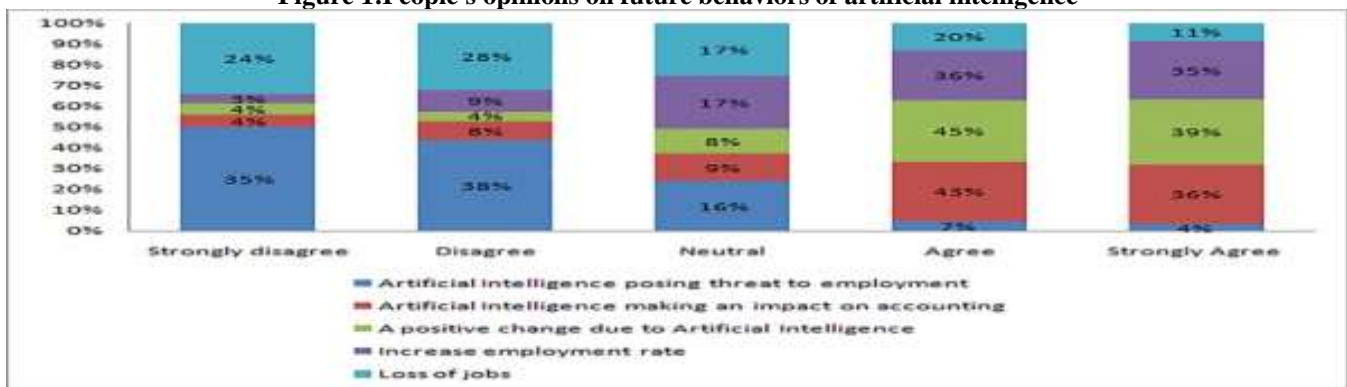


Figure 2 :when do you predict AI will take over SEO

Elon Musk says artificial intelligence will eventually replace most jobs. When do you predict AI will take over SEO?

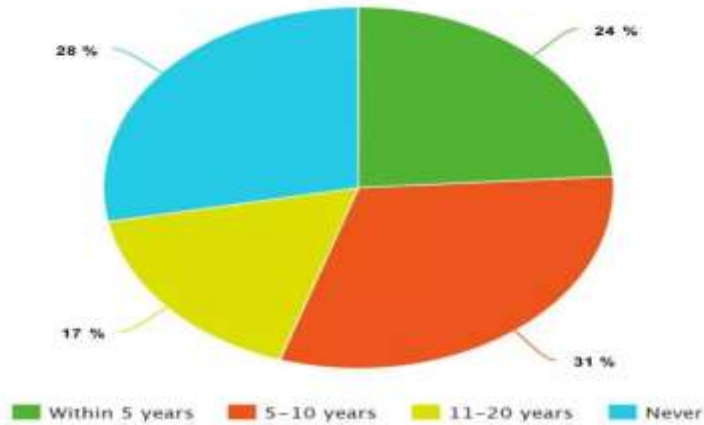


Figure 3 : Artificial intelligence in food and beverages market size

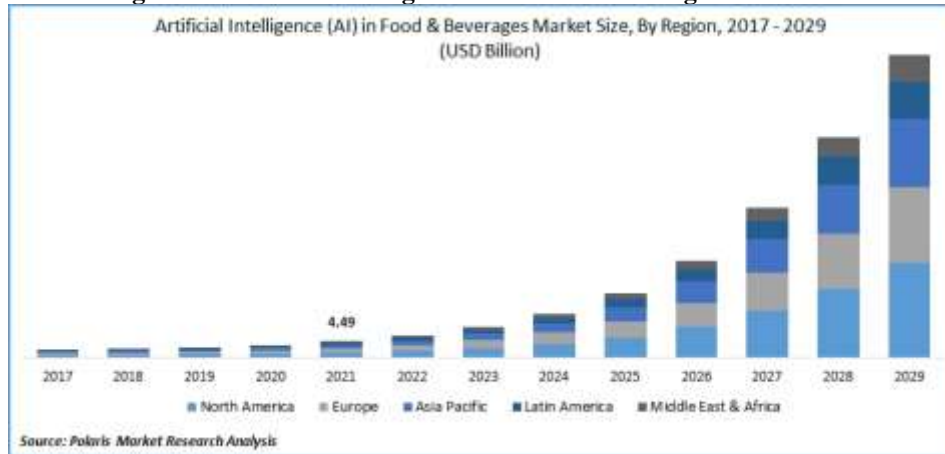


Figure 4:





CONCLUSION

AI has captured widespread attention across the public, academia, and government, emphasizing its crucial role in today's society (Cox, 2021). This study centered on assessing the awareness and knowledge of AI among accounting students, revealing a moderate level of comprehension within the examined context. Offering a fresh perspective on AI's diverse applications, the findings provide valuable insights to influence the interest and knowledge of accounting students in AI technology. Recognized as a noteworthy progression in AI technology research, the study highlights the imperative for continued exploration and a deeper understanding of AI and its evolving scope for future reference. Despite its contributions, certain limitations, such as potential constraints in generalizing results due to the specific selection of accounting students from UiTM Tapah, were acknowledged. Future research is encouraged to broaden the sample selection for a more representative population. Additionally, the study's exclusive focus on awareness and knowledge underscores the importance of exploring other contributing variables, including potential negative effects of AI, to enhance overall comprehension. To mitigate respondent bias, future research should thoughtfully consider questionnaire distribution, potentially favoring face-to-face surveys to ensure more candid and unbiased responses.

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