

Intersection of artificial intelligence, legal frameworks and psychological dynamics in academic libraries

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Industry-seasoned individuals and scholars have extensively deliberated on the significance of artificial intelligence (AI) in the information fraternity. While consensus underscores the symbiotic relationship between AI and human efforts, this concept's dynamic and evolving nature evokes apprehension among stakeholders. This literature study discusses the nuanced exploration of challenges and opportunities of AI in academic libraries, aiming to contribute insights for informed decision-making and ethical implementation. Following the qualitative approach, the review included 2125 hits, 45 of which were considered for study. Adopting a comprehensive approach, this paper scrutinises dimensions influencing AI's acceptance and ethical use, encompassing psychological impacts, AI legalities, skill set alignment and a futuristic perspective. The study uncovered critical information warranting dissemination, emphasising the need for a balanced discourse on AI's implications. The researchers present challenges and strategic recommendations for addressing them. By expounding the preliminary findings, the study adds a practical dimension to the discourse on AI in academic libraries, guiding stakeholders in judicious decision-making and aspires to contribute to the ongoing dialogue surrounding AI in academic libraries, offering a holistic perspective extending beyond conventional discourse and equipping stakeholders with insights for navigating the landscape of AI integration.

Keywords: artificial intelligence, ethical implementation, legalities, psychology, libraries

1 Introduction and background

The provision of information services in academic libraries using artificial intelligence (AI) is becoming more prevalent. AI is commonly defined as computer-controlled robots exhibiting intelligent thought processes akin to human beings. These electronically designed entities leverage computer assistance to emulate human cognitive functions, systematically recording and analysing user actions. The integration of AI into various aspects of human life, driven by advancements in science and technology, has led to significant contributions to progress and convenience (Nwakunor 2021).

Heath (2018) characterises AI as a technological framework empowering machine with capabilities such as planning, learning, reasoning, problem-solving, mobility and, to some extent, creativity. The profound impact of AI and sophisticated computer technology on the future landscape of libraries is anticipated, introducing distinctions in quality that deviate from current expectations. The historical context of the initial industrial revolution sought to replace human labour with machinery (Vijayakumar & Sheshadri 2019).

Libraries play a crucial role in facilitating educational endeavours, catering for students across various academic levels, from primary education to university studies. Serving as integral components of educational institutions, libraries can be categorised into three types based on their user base: academic, public, and special. While each category shares a fundamental role, the distinction lies in their respective user demographics. The primary function of libraries is to offer information services to seekers or users, and to do this, libraries implement diverse services. Commonly employed library services encompass research assistance, resource circulation, cataloguing for efficient resource retrieval, photocopying facilities, current awareness services, selective dissemination of information services, reading room amenities and subscriptions to subject-specific scholarly journals, among others. The landscape of information provision has undergone a significant transformation with the emergence of information and communication technologies (ICTs).

Within the operational framework of academic libraries, emerging trends in AI implementation include expert systems in reference service, cataloguing, classification, indexing and acquisitions, as well as AI in natural language processing, pattern recognition and robotics within library activities (Adejo & Misau 2021). Contrary to initial beliefs about AI replacing blue-collar work, the narrative has evolved. AI, like parking assistance in modern vehicles, aims not to replace human jobs, but to minimise human errors and miscalculations. It is crucial to view AI as a tool offering assistance rather than a replacement for human capabilities. Ethical considerations arising from these innovations cannot be ignored. The

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prevalence of AI in providing information services in academic libraries is increasing. Similar to other disciplines, technology's benefits include reducing time spent on repetitive tasks, minimising human errors and improving outcomes. The attempt to replace human power with machines dates back to the first industrial revolution. AI is rapidly transforming the library and information (LIS) landscape, necessitating information professionals to adapt, acquire relevant knowledge and skills, and overcome job security concerns.

Like in many disciplines or professions, the benefits of using technology include reducing time spent on repetitive and less interesting tasks, minimising the possibility of human errors, and improving results. It is worth mentioning that the attempt to replace human power with machines has been a topic for some time, hence the introduction of the First Industrial Revolution. AI is rapidly changing the LIS fraternity due to the benefits of improving and redesigning the activities of the LIS landscape. The most important aspect of this reality is that information professionals quickly adapt to the new status quo, acquire the knowledge and skills needed to work with AI and overcome the fear of losing jobs. While AI is expected to limit employment opportunities, it is believed that it will create new opportunities, provided the LIS professionals acquire adequate knowledge and skills compatible with AI.

2 Problem statement

Libraries, in general, are increasingly adopting AI in their operations. Although the rate of adoption varies, it is important to note that some institutions remain hesitant to integrate AI into their systems. On a global scale, both the library environment and the technological landscape have exhibited ongoing transformations, with anticipated changes persisting into the future. Consequently, libraries are compelled to align themselves with the prevailing and dynamic technological advancements to ensure their continued relevance, enhance value optimisation and expand access to the effective and efficient delivery of information services.

A study by Wheatley and Hervieux (2019) revealed a particularly unexpected finding, revealing that none of the universities or their respective libraries explicitly reference AI in their strategic plans. Despite the recent nature of most plans, there is a conspicuous absence of initiatives designed to contend with the burgeoning influence of artificial intelligence technology. Hence, this paper aimed to investigate the intersection of AI, legal frameworks, and psychology.

3 Purpose and objectives of the study

This study aimed to explore the relationship between AI, legal frameworks, and psychology, and to examine how these factors collectively influence AI adoption. The following were the objectives of the study:

- Identify the linkages between the relevant variables (law and psychology) and their respective contributions to the acceptance and use of AI.
- Contribute to the development of the AI legislative framework and acceptance by highlighting the challenges and opportunities that AI can provide to the LIS profession.

4 Literature review

This part of this scholarly work reviews the literature pertaining to the connection between AI, law and psychology. There is no need to reinvent the wheel; therefore, the aim was to join the ongoing scholarly discussion pertaining to AI in the LIS context. The current discourse surrounding AI underscores its growing prominence, particularly concerning its potential ramifications for humanity. Contemporary libraries are not merely information repositories, as they have undergone a transformative evolution wherein, they actively engage and collaborate with users. This paradigm shift signifies a departure from traditional library services towards a more modern, interactive model. Libraries are increasingly incorporating AI into their repertoire, utilising interactive, collaborative, and multimedia-based technologies for services and collection references. The surge in interest towards technological advancements in library services was evident in recent case studies and the proliferation of AI applications designed specifically for library reference purposes. The uptake of smart devices has become an undeniable force, compelling libraries to acknowledge and integrate these technologies.

4.1 AI in the LIS context

The integration of new technologies into libraries is underscored by numerous studies that serve as benchmarks for tracking evolving attitudes towards emerging services. Mhlanga (2021) asserts that, in the context of the Fourth Industrial Revolution (4IR), AI is realising its potential by delivering tangible value facilitated by the availability of pertinent data, computational capabilities and sophisticated algorithms. Furthermore, the researcher identifies AI's substantial contributions to education and the financial sector, enabling the participation of previously marginalised individuals in the mainstream economy. Consequently, it is imperative that governments in emerging economies augment their investments in AI implementation.

Kaplan and Haenlein (2020) posit that delineating the concept of AI is a complex task, and this difficulty arises from three principal reasons. Firstly, defining human intelligence itself is inherently challenging, consequently, applying this ambiguous notion to machines poses a formidable challenge. Secondly, there exists a phenomenon termed the AI effect wherein the acknowledgement of a machine's proficiency in a complex task diminishes once such performance becomes commonplace (Kaplan & Haenlein 2020). This phenomenon contributes to the elusive nature of defining AI, as it appears to be a constantly shifting target. Thirdly, AI undergoes various evolutionary stages, progressing from narrow to general to superintelligence and further classification based on cognitive, emotional, and social competencies results in analytical, human-inspired and humanised AI categories (Kaplan & Haenlein 2020). The confluence of these diverse stages and types often leads to confusion and ambiguity surrounding the term itself. As novel as AI sounds, it is not new. The term was coined in 1956 in a proposal by an elite group of computer scientists and mathematicians who organised a summer workshop called the Dartmouth Conference (Hildebrand 2019).

Kaplan and Haenlein (2020) contend that the definition of AI is inherently challenging and three primary factors contribute to this complexity. Firstly, the inherent difficulty to define human intelligence complicates the extension of this concept to machines. Secondly, the occurrence of the AI effect, whereby the recognition of a machine's proficiency diminishes with familiarity, further complicates the definition of AI. This phenomenon results in AI consistently eluding a precise definition. Thirdly, AI undergoes distinct evolutionary stages, encompassing narrow, general and superintelligence, with additional classification based on cognitive, emotional, and social competencies, such as analytical, human-inspired, and humanised AI (Kaplan & Haenlein 2020). The conflation of these various stages and classifications often engenders confusion surrounding the term itself. Vijayakumar and Sheshadri (2019) propose an alternative definition of AI, emphasising non-algorithmic methods for problem-solving and symbolic representation. Their definition encompasses areas such as expert systems, artificial neural networks, fuzzy logic, image processing, natural language processing, speech recognition and robotics. Notably, the scholars assert that AI and librarians mutually reinforce each other, with AI serving as a supplementary rather than a threatening tool.

In contrast, Haenlein and Kaplan (2019) present a slightly different classification, categorising AI into analytical, human-inspired and humanised AI, based on exhibited types of intelligence or into artificial narrow, general and superintelligence, based on its evolutionary stage. Notably, they acknowledge the transformative impact of AI on various domains, including image recognition, smart speakers, and self-driving cars, attributing these advancements to the system's ability to interpret external data, learn from experiences and adapt flexibly to achieve specific goals.

Holzinger (2019) builds on these definitions, underscoring the growing interest in AI, driven by practical successes in machine learning (ML). This scholar highlights ML as a practical field of AI, emphasising its ability to automatically learn from previous data, gain knowledge from experience and improve learning behaviour for predicting outcomes based on new data. AI can be broadly defined as intelligence exhibited by machines (Siau 2017). Russell and Norvig (2003:31) define AI as intelligence that uses sensors to perceive and effectors to react to the environment. It is the science and engineering of making intelligent machines, especially intelligent computer programs. While the goal of utilising computers to comprehend human intelligence is comparable, artificial intelligence (AI) should not limit itself to techniques that can be observed through biological means (El Hajal, & Rowson 2020). A study by Wirth (2018) contended that AI, in its present state of development, has the potential to either replace or enhance the necessary expertise for making well-informed marketing decisions, whereas another critical study by De Bruyn et al. (2020) caution against just defining AI as the "intelligence demonstrated by machines" and not defining the perimeter well enough, which could potentially lead to more confusion.

4.2 AI legislative framework

In a study conducted by Wheatley and Hervieux (2019), only five university libraries out of the 27 sampled offered programming and services related to AI. These authors also discovered that very few university libraries collaborated with other departments within their institutions on AI initiatives. The current state of AI in academic libraries has proven to be nearly non-existent. The lack of research poses a gaping hole in the literature, which will need to be filled if libraries expect to engage in the AI conversation. The libraries that are already active and creating opportunities for engagement have set the pace for future work. Wheatley and Hervieux (2019) report a notable absence of explicit mention of AI in the strategic plans of universities and university libraries, despite the prevalence of digital innovation and initiatives in these documents. This oversight suggests a critical gap in addressing the rise of AI technology within academic institutions.

Raj and Seamans (2019:11) distinguish between AI, robotics, and automation, clarifying that robotics pertains to physical task automation, while AI involves computer-based learning without requiring physical manipulation. The researchers acknowledge the potential overlap between the two technologies, as applications of AI may involve robotics and vice versa. Turning to the impact of AI on education, Mhlanga (2021) highlights the potential of AI to address educational

inequalities, particularly for impoverished children. Through adapted learning techniques and AI-driven strategies, such as intelligent chatbots acting as tutors, AI can personalise education and enhance accessibility for disadvantaged students.

According to Wheatley and Hervieux (2019:349), the most surprising result from the environmental scan was the discovery that no university or university library mentions AI in their strategic plan. While most plans were fairly recent, there were no initiatives to address the rise of AI technology. Most university libraries did include statements about digital innovation and initiatives, and some, such as the University of California Berkeley, specifically addressed areas such as a digital scholarship. It was also interesting to note that some universities and their libraries did not have strategic plans or mission statements accessible on their websites. Mentions of AI could be found within more dedicated research plans for some of the institutions.

4.3 AI in psychology context

Konar (2018) defines AI as a machine's capacity to simulate human thought processes, primarily in computers. Cognitive psychology and AI both aim to address issues related to human memory, learning and decision-making (Gonzalez 2023). Neural networks, inspired by the human brain, are a key convergence point between these fields, used to simulate learning and decision-making in AI (Kriegeskorte & Douglas 2018). AI applications span various fields, including games, law, stock trading and scientific inventions (Tahan & Zygoulis 2019). The term "artificial" denotes a non-human system capable of adapting and performing human functions (Bonneton, Rahwan & Shariff 2024). AI's complexity and influence have grown significantly, intertwining with cognitive psychology to understand and replicate human mental processes in robots.

Psychology, the study of human behaviour and mental processes, encompasses various domains (Crowder & Friess 2012). Developmental psychology examines changes across the lifespan, sports psychology focuses on performance and cognitive psychology studies brain functions like logic, learning, perception, memory, and language acquisition (Gado et al. 2022). Cognitive psychology closely links to AI studies, with both fields seeking to model human thinking in AI (Hudson 2020). Wilhelm Wundt, the founder of psychology, emphasised modelling human thinking in AI to address psychological problems (Gado et al. 2022). AI systems process information similarly to the human brain, supporting autonomous learning, thinking and self-development (Crowder & Friess 2012). Artificial psychology studies how AI systems learn, recall, and integrate information, focusing on emotional intelligence and natural language processing (Tahan 2019).

Dan Curtis (1963) introduced artificial psychology, proposing that AI must fulfil three conditions to match human intelligence:

- Make independent decisions based on abstract, new, and incomplete information.
- Evolve based on new information.
- Program conflicts and resolutions independently, even with incomplete information (Bonneton et al. 2024).

5 Research methodology

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6 Discussion and findings of the study

This section presents and discusses the findings of the study.

6.1 Artificial intelligence skills for academic librarians

The scholarly exploration of the intersection between AI and librarianship exhibited limited prevalence. In contrast to the exponential growth observed in various disciplines, the field of information sciences has not experienced commensurate advancement in the examination of this particular subject matter (Wheatley & Hervieux 2019). In contrast, Ogwo, Ibegbulem and Nwachukwu (2023) state that numerous investigations have explored the influence of AI on library services. There is a paucity of research pertaining to the applications and perceived effects of AI specifically within the context of academic libraries.

A study conducted by Wheatley and Hervieux (2019) revealed that the dearth of scholarly investigations into AI-related technologies within library contexts is not surprising. Libraries have grappled with challenges pertaining to incorporating digital technologies and a pervasive resistance to change spanning the twentieth and twenty-first centuries. The process of library computerisation experienced a gradual inception in the 1960s with the emergence of automated internal processes, yet it did not attain full fruition until the subsequent decades, specifically the 1970s and 1980s.

In the era of AI and ICT, librarians must deepen their understanding of users' goals and aspirations. Integrating AI infrastructure can foster user engagement, collaboration, and participation in library services. To achieve this, librarians must acquire proficiency in AI tools and techniques. The evolving landscape of libraries, influenced by new ICT tools and techniques, promises to make libraries more relevant and acceptable. AI tools, in particular, are bringing about evolutionary changes, transforming library collections and services into more interactive and accessible entities.

6.2 AI legal framework

Undoubtedly, most individuals consider themselves law-abiding citizens, adhering to the legal frameworks within their respective jurisdictions. Moreover, acknowledgement of international laws and guiding documents such as the Sustainable Development Goals (SDGs), United Nations (UN) principles and World Health Organization (WHO) guidelines underscores our commitment to global norms. Yet, amidst the proliferation of AI, how can we ensure compliance with the rule of law in its implementation? In addition, Cath (2018) suggests that the potential for AI to be misused or demonstrate unforeseen and potentially harmful behaviours underscores the importance of investigating the intersection of law, ethics and technology in regulating AI systems, which is more crucial than ever before.

Raj (2020) states that the 4IR represents the culmination of various emerging concepts and novel technologies, including radio-frequency identification (RFID), big data, cloud computing, smart sensors, ML, robotics, additive manufacturing (AM), AI, augmented reality, and the Internet of Things (IoT). Research indicates that the adoption of the 4IR is a multifaceted process, presenting challenges for companies worldwide. Consequently, there is a pressing need to identify and understand the barriers to implementation and their interrelationships. Such insights can inform the development of effective mitigation strategies, facilitating smoother adoption of 4IR technologies across diverse industries and regions. Cath (2018) adds that, globally, stakeholders, including industry representatives, governments, academics, and civil society, are engaged in discussions regarding the necessity of legal-regulatory frameworks and determining the circumstances under which ethical or technical approaches may be sufficient.

Extensive deliberation on AI's capabilities reveals that many tasks performed by AI can also be executed by humans, albeit with varying efficiency. Legal frameworks often reserve specific employment domains for citizens while extending some roles to foreign nationals, particularly in areas with a skills shortage. Post-colonial African nations prioritise rectifying employment inequities as part of human rights advocacy. In South Africa, systemic exclusion of marginalised groups led to initiatives like black economic empowerment (BEE) and broad-based black economic empowerment (BBBEE), fostering inclusivity and socio-economic transformation. Mudau (2022) notes that B-BBEE has significantly impacted South African companies, compelling them to align with BBBEE objectives and promote black economic empowerment. Bezuidenhout (2018) highlights that apartheid's legacy of marginalisation prompted the democratic government to redress historical injustices and ensure equitable market access. The uptake of AI raises concerns about BBBEE objectives and potential adversities. Employment equity (EE) policies aim to align workforce demographics with national statistics, emphasising organisational transformation to reflect societal diversity.

However, global disparities between developed and developing nations complicate AI integration. Questions arise regarding AI's gender and racial identities and the delineation of responsibilities between AI and humans. Niebel (2018) found no significant variations in the output elasticity of ICT investments among developing, emerging, and developed

nations, challenging the notion of 'leapfrogging' through ICT advancements. Recognising human intellect's centrality to societal dynamics, AI discussions must consider socio-economic disparities. Regions with high illiteracy, poverty, and unemployment, particularly in Africa, Asia and India, need foundational educational interventions before they can adopt AI. Conversely, nations with strong socio-economic indicators can more rapidly deploy AI technologies.

Adams (2021) states that many governments' limited involvement in advanced technology, coupled with inadequate experience and slow administrative processes, hampers the establishment of necessary legal, institutional and policy frameworks. In Africa, the passive adoption of advanced technologies and policies with minimal national adaptation underscores the need for robust infrastructure, effective intellectual property management and relevant skill cultivation for successful 4IR integration. Moreover, as technology aims to enhance human well-being, rigorous scrutiny of AI's potential impacts on human life is essential. Pre-emptive measures should mitigate potential harms and uphold fundamental human rights. Thus, in charting the course of AI integration, a comprehensive approach that balances technological advancement with societal welfare emerges as imperative.

6.3 The psychology of artificial intelligence

Over the years, AI has been an emerging technological innovation that has attracted much attention and gained significance in research, businesses and governments who are interested in data analysis of semi-autonomous or autonomous findings. One of the most intriguing aims of AI is to have machines that are intelligent enough to reason, think, learn, experience and function independently without being monitored. The main challenge of reasoning and learning is that there are various possible solutions to the problems associated with the latter, and therefore, the need to denote the underlying principles, concepts and theories of AI becomes relevant. Presented in this paper is a discussion on how AI could play out in the artificial mind and the psychological constructs thereof. This section presents a discussion on cognitive psychology and how AI can be used to replace the functions of the human brain. The discussion does not provide any survey of research done, but rather, it is based on work that has been completed by other scholars.

This section explores the relationship between cognitive psychology and AI, focusing on how thinking and programming are fundamental to both disciplines and the possible effects of AI taking over the position of the human mind. A philosophical analysis of AI is presented by Haugeland (1989), who argues that AI entails comprehending and reproducing the concept of intelligence itself rather than merely building machines that behave like humans.

This concept questions fundamental ideas about the nature of cognition and the lines dividing AI from human thought. Cognitive psychology is the study that deals with how people perceive, grasp, recall and envision information (Sternberg & Li-fang, 2014). It involves mental functions such as perception, reasoning, memory and problem-solving (Zimbardo 2002).

To understand how the brain encodes, stores, and retrieves information, cognitive psychology also considers neural networks. AI and cognitive psychology both look into the function of language in thought and communication, in addition to neural networks. Researchers in AI have created algorithms for natural language processing, which enables machines to understand and speak human language. Language processing is a fundamental element of human cognition.

The similarities and differences between cognitive psychology and AI can be seen in the way that both fields' thinking and programming processes are wired. Algorithms and rules that specify how machines should process information and make decisions are used to programme thinking in AI (Tien 2017).

The problem of explaining human cognition within the confines of physical reality is boldly taken on by Anderson (2007). Using insights from cognitive psychology and neuroscience, he investigated the processes through which the mind arises from the operation of the brain. This investigation was necessary to comprehend the similarities and differences between the programming of AI systems and human thought processes, since both are essentially based on physical processes. According to Yu et al. (2023), all systems use statistical learning and symbolic reasoning to deduce patterns from data to carry out tasks like autonomous navigation, speech synthesis and image recognition. Conversely, cognitive psychology sees thinking as a multifaceted process that includes memory, perception, attention and problem-solving. Human decision-making is shaped by a variety of cognitive biases, emotions and heuristics; unlike AI systems, human thought is not always rule-based (Kliegr, Bahník & Fürnkranz 2021).

According to Pylyshyn (1948), the mind functions as a computational system that manipulates and represents symbols to process information. Pylyshyn (1948) provides insights into the possible relationships between human thought and AI algorithms by laying the foundation for understanding the interplay between programming and cognitive processes. Despite these distinctions, improving our knowledge of the human mind and creating intelligent systems that can think like humans are the shared objectives of cognitive psychology and AI.

Combining knowledge from the two domains allows researchers to develop AI that is more efficient, flexible, and focused on the needs of people. Increasingly more individuals are worried that as AI technology advances swiftly, machines may eventually replace people in a range of professions. The idea that AI might ever completely replace a human being is a topic of debate among researchers and ethicists, even though AI has demonstrated extraordinary potential in industries

like healthcare, finance, and transportation. One of the primary concerns is AI's effect on the labour market and the economy. As it becomes more advanced, AI has the potential to automate repetitive jobs and tasks, which would displace workers and increase unemployment (Tschang & Almirall 2021). This begs the ethical questions of whether AI can replace human labour and whether laws addressing the social effects of AI-driven automation are necessary. The moral application of AI to decision-making is another issue.

The collective insights provided by these influential references provide a diverse range of viewpoints regarding the relationship between cognitive psychology, thinking, programming and AI. They provoke us to consider important issues such as the nature of intelligence itself, the computational basis of cognition, the structure of the mind and the complex processes involved in human thought. We can comprehend the intricate and understated relationships that underlie the effort to replicate human intelligence in AI systems at a deeper level when we examine these works. With the ability to design and develop increasingly complex AI systems that can comprehend and interact with people more effectively, the nexus of AI and cognitive psychology holds great promise for the future.

How humans receive the use of AI to perform some human functions has to be navigated with the utmost care and the sensitivity it deserves. For example, humans are concerned about how AI will take over their jobs. Although literature reveals that it would not be so easy to do away with humans completely and replace them with AI, the progress being made in the field of AI and cognitive psychology is persuading humans to learn more about AI and how it can work to the advantage of humans. To take into consideration and to introduce AI to humans are the ethical dilemmas that could arise with the use of technology in cognition functions. There are available ethical guidelines and policies to be followed as more work is being done in the fields of AI and cognitive psychology.

7 Recommendations

The convergence of AI, legal frameworks and socio-economic dynamics calls for a comprehensive approach that effectively balances technological progress with ethical considerations and social equity. By harnessing AI to address systemic inequalities and promote inclusive development, we can unlock its transformative potential to advance human welfare while mitigating potential risks. Moving forward, interdisciplinary collaboration and contextual sensitivity will be crucial in shaping AI policies and practices that align with our collective values and aspirations for a more just and equitable society. AI has emerged as a focal point across various sectors, including research, business, and governmental entities, owing to its capacity for autonomous data analysis. The aspiration to develop machines capable of independent reasoning, learning and functioning underscores the significance of understanding the underlying principles, concepts, and theories of AI. This paper explored the intersection of AI with cognitive psychology, delving into the potential implications of AI on the artificial mind and associated psychological constructs.

Despite AI's remarkable potential in domains such as natural language processing and decision-making, ethical considerations and societal implications remain paramount. Questions regarding AI's impact on the labour market, its potential to replace human labour and the ethical application of AI-driven decision-making underscore the necessity for comprehensive ethical guidelines and policies. As AI technology progresses, the synergistic relationship between AI and cognitive psychology offers immense promise for shaping the future landscape of technology and human-machine interactions. However, it is crucial to approach the integration of AI into society with caution, sensitivity, and adherence to ethical principles, ensuring that AI serves to enhance human capabilities while addressing potential risks and ethical dilemmas. A thorough environmental scan, legislation and continuous discussions with pertinent stakeholders are recommended if we were to harness AI.

8 Conclusion

In conclusion, technology's primary role is to advance human progress, and AI is no exception. AI aims to complement the human labour force in libraries, promoting collaboration between human workers and intelligent systems. However, it is crucial to recognise that both white-collar and blue-collar jobs within the LIS fraternity will be impacted. Therefore, an agenda focused on upskilling and reskilling the workforce should be prioritised. Furthermore, this transition must be guided by a commitment to transparency. Executives and champions of AI implementation are expected to maintain honesty and openness, avoiding any temptation to manipulate stakeholders into accepting AI without fully understanding its implications. Transparent communication is essential to gain genuine buy-in and ensure a smooth and ethical integration of AI into the LIS workforce.

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