A Narrative Exploration of the Effect of Artificial Intelligence on Managerial Functions in Africa

Edward Phele
Department of Information Systems, North-West University, South Africa. Email: roidqueipsy@gmail.com

Nathan Davids
Department of Information Systems, North-West University, South Africa. Email: natedogdavids12@gmail.com

Pako Ntchupetsang
Department of Information Systems, North-West University, South Africa. Email: pakonchupetsang13@gmail.com

Anita Ratlou
Department of Information Systems, North-West University, South Africa. Email: siyandaanita2@gmail.com

Mohammed Aqil Malek
Department of Information Systems, North-West University, South Africa. Email: malekaqil786@gmail.com

Joshua Ebere Chukwuere
Department of Information Systems, Technology Enhanced Learning and Innovative Education and Training in South Africa (TELIT-SA), North-West University, South Africa. Email: joshchukwuere@gmail.com

Aadil Malek
Department of Information Systems, North-West University, South Africa. Email: malekaadil493@gmail.com

Richard Abolade Akinkunmi
Department of Information Systems, North-West University, South Africa. Email: richardakinkunmi08@gmail.com

Abstract—**The role of Artificial Intelligence (AI) across sectors is massive, and its effects are felt in Africa. African businesses are beginning to adopt AI tools and applications for performing basic and complex real-time insights, predictive analytics, automation processes, enhancing competitiveness, operational efficiency, and strategic decision-making. This study aims to examine how AI affects management functions and the decision-making process in African organisations. The study employed a Narrative Literature Review (NLR) methodology in reviewing academic publications within the research topic to uncover gaps and achieve the objective. The findings revealed that AI affects managerial functions in Africa by enhancing consumer engagement and sustainable development, supporting managers to focus on innovation and value creation by streamlining the repetitive task process. In general, the study confirms that AI is becoming an effective enabler of management success in Africa's changing economic context, combined with ethical governance and digital literacy. However, the application of AI in managerial functions has a long way to go. In the future, academics can investigate how African organisations can formulate governance models (frameworks) to tackle ethical issues such as algorithmic bias, data privacy, plagiarism, and ethical decision-making. In addition, research can focus on finding the competencies and skills required for African managers to use AI in driving the decision-making process to improve performance and operational functions.**

Keywords- African organisations; Artificial intelligence (AI); Decision-making; Digital transformation; Managerial functions; Operational efficiency

I. INTRODUCTION

Artificial Intelligence (AI) is essentially reshaping humanity's lifestyles in the 21st century by changing the ways people live, educate, communicate, and work. The impact of Information and Communication Technology (ICT) in the world is felt in many sectors, such as agriculture, finance, education, and media, where it facilitates businesses in accessing broader markets, making better decisions, and offering better services [1]. The adoption of AI in Africa is not only seen as the continent's way of modernising, but at the same time as a source of solutions to age-old problems in the government, business, education, and development sectors. According to the United Nations Development Programme estimate for Africa, AI will potentially contribute $1.5 trillion economically and shape the socio-economic and technological sectors [2]. Companies on the continent are collectively getting used to the idea of employing AI as a means of decision-making, a tool for productivity, and an instrument of innovation, which leads to a gradual shift from traditional management to data-driven operations [1].

Artificial intelligence technologies are extensively implemented in data analysis in most African businesses, especially in the financial sector, agriculture, logistics, and creative industries, to achieve higher accuracy, eliminate the possibility of flesh-and-blood (human) errors, and furnish managers with up-to-the-minute information [20]. A good example is machine learning used by banks for the purpose of improving credit assessment and fraud detection; on the other hand, retail and logistics businesses use predictive analytics for demand forecasting and inventory optimisation. All of these allow managers to make decisions quickly and accurately, enabling them to strengthen their position in both local and global markets. The State of AI in Africa Report [3] also state that this trend towards technology is only a part of a bigger economic transformation that will be the primary driver of the digital economy in Africa, which is projected to be over USD 180 billion by 2030. The success of these projections lies in the available resources. The arguments presented in the African Union Digital Transformation Strategy (2024-2030) state that the success of the digital economy in Africa depends on the capacity to balance innovation and human values. To this point, it is necessary to comprehensively aggregate the role and impact of AI on managerial functions in Africa. Then, this narrative literature review aims to examine how artificial intelligence affects managerial functions and the decision-making process in African organisations. The rest of the paper covers the following sections 1) problem statement, 2) scope of the study and objectives, 3) Research method, 4) how AI enhances management capabilities, 5) organizational and systematic benefits and AI in business, 6) AI in both a positive and negative transformation catalyst for emerging African managers, 7) implications for higher education, and 8) conclusion.

II. PROBLEM STATEMENT

In addition to optimising efficiency, AI can also be a source of democratisation and the development of local businesses. The African youth are already engaged in creating AI-based solutions in various industries, including agriculture (precision farming), health (diagnostic imaging), and government (smart governance platforms). In this way, they are creating new markets that were not accessible in the past, in addition to spurring socioeconomic development. Additionally, the fact that AI will relieve the administrative side of jobs from mundane/stereotypical tasks will lead to a scenario where future leaders will be able to spend more time on the most innovative and strategic thinking, which are the most sought-after attributes of the modern business environment [4].

Nevertheless, the pace with which AI technology has been developed in Africa has been greater than the establishment of the various ethical and legal parameters needed to regulate practice, which imposes a significant burden on the continent. Although nations such as South Africa, Kenya, and Nigeria have already begun the AI strategy formulation process, the majority of African regions have yet to establish the regulatory frameworks upon which the responsible use of AI can be undertaken [5]. This situation has resulted in issues of privacy, algorithmic discrimination, and even misappropriation of personal data. According to the African Union Digital Transformation Strategy (2024-2030), the advantages of AI might be overshadowed by inequality and exploitation when there are no policy interventions. Surveillance, data privacy, and algorithmic bias are now issues of immediate concern [5].

The key issue then is not whether Africa can embrace AI, but rather whether it will be able to manage its usage. In the absence of regulation or control, AI is likely to exacerbate the existing disparities in social and economic life by placing the upper hand on those businesses that possess abundant data and more sophisticated technologies. Moreover, the lack of proper data protection frameworks suggests that user information can easily end up in the wrong hands, where it can be abused unethically, which may subsequently cause mistrust among users of digital platforms. This type of mismanagement can hurt employment opportunities, fairness in decision-making, and even democratic accountability in countries where governance is weak, as is the case in this country.

This is a two-edged sword-like situation with opportunities and challenges for the new managers. They must embrace AI as a major tool that can lead to higher efficiency, better decision-making, and better competition. At the same time, they should have the required knowledge and ethical sense, or rather "the right way of doing things," in order to manage AI in the correct way. Managers who are familiar with the social impacts of AI will have the ability to apply it in such a way that results in sustainability and fairness. This is especially vital for African managers operating in fast-developing but resource-limited environments. They play a key role in deciding how AI can be used to promote the integration of the less privileged in the development process, instead of further widening the gap between the rich and the poor.

III. SCOPE OF THE STUDY AND OBJECTIVES

A. Scope of the study

In this review of the literature, the specific context under consideration is in African contexts, which include Sub-Saharan Africa and North Africa. Although the review relies on the global AI management literature in which African-specific research is limited, the analysis focuses on studies, examples of cases, and empirical findings from African countries and regions. In cases where global research has been mentioned, it is explicitly taken into account that the study can be generalised to African business settings and can be transferred to them [6]. The African focus is explained by the fact that the African continent has its own socio-economic specifics, such as a young population, high rates of penetration of mobile devices, inconsistency in infrastructures, entrepreneurial mobility, and the presence of certain developmental challenges that result in unique conditions to address the managerial influence of AI [7].

The main aim of this literature review paper is to critically analyse and summarise available academic studies on the benefits of AI tools for future managers in Africa, given the growing penetration of AI in business processes. AI technologies can be enablers and amplifiers of managerial performance instead of threats to managerial fitness [8]. Due to the fast digitalisation of African economies and social aspects of society, it is urgently needed to comprehend how AI tools could be used strategically to increase managerial capabilities, organisational performance, and be part of the overall economic development goals [4]. The current literature remains mainly based on the experiences of developed economies with significantly different infrastructural, economic, and social circumstances [9].

B. Research main objective and subobjectives

To examine how artificial intelligence affects managerial functions and the decision-making process in African organisations.

This objective is subdivided into four sub-objectives for a better understanding of the topic of the study:

- **a.** Investigate how AI technologies enhance the managerial capabilities of African managers.
- **b.** To explore the benefits and negative perspectives of AI in business functions and operations.
- **c.** To examine the positive impact on managerial business operations in Africa.
- **d.** To assess the implications of AI for African higher education in preparing managers.

IV. RESEARCH METHOD

There are many types of research methodologies that can be used to carry out a literature research paper. One of them is a narrative literature review (NLR). NLR can be considered a traditional literature review methodology with the ability to synthesise existing research topics in a comprehensive way to discover gaps [10] [11]. NLR is flexible in allowing researchers to define inclusions and exclusions to deepen their understanding of the topic under discussion. Review what is in the literature on a certain topic, but the findings cannot be generalized [10]. To synthesise, the researcher can focus on a particular area of a study, and the inclusion criteria can be biased [10] [12].

This literature review methodology can be used in different disciplines, such as health, information systems, and many others, without a defined structure [10] [13] [14]. The role and implications of AI for emerging managers in Africa are still limited; however, there is a need to review the existing literature to identify the gaps in the literature. The identification of research gaps can lead to an understanding of the state of things in the research area and discipline, as well as providing a pathway for future research.

A. Search process and execution

The researcher applied this methodology in the study to better discover the research gap in the topic by looking at how artificial intelligence affects managerial functions and the decision-making process in African organisations. To achieve the research objective, there was a comprehensive literature review in established scientific databases, such as Web of Science, Scopus, IEEE Xplore, EBSCOhost, African Journals Online (AJOL), and ScienceDirect, as well as sources of grey literature such as Google Scholar. Keyword searches used included adoption AND decision-making of AI in Africa, AI AND Africa, AI AND African organisations, AI ethics AND governance in Africa, and Artificial Intelligence AND managerial functions.

The findings of the study will provide aggregated information and knowledge on the core effects of AI on managerial functions in African organisations. To achieve this, the study focuses on literature that covers AI managerial roles for managers (those within five years), or those who have moved from non-managerial positions to managerial positions, as well as mid-career management (under 40 years old and with less than 10 years of managerial experience). This population segment is tactical, as emerging managers are the future of African organisations and, at the same time, are digital natives who feel more comfortable with technology and are professionals whose career paths are most influenced by the implementation of AI in business.

B. Inclusion and exclusion criteria

Inclusion and exclusion criteria are used to increase transparency, strengthen credibility, and reduce bias [15, 16]. Inclusion criteria were used in the study to define the characteristics of the literature to be considered in accordance with the research objective.

The inclusion includes:

- **a.** Relevant literature on the topic, such as AI
- **b.** Peer-reviewed articles, book chapters, and conference proceedings.
- **c.** Current publications from the last five years and at most ten years.
- **d.** Publications in English.
- **e.** Literature studies on African emerging managers or managers.

Exclusion criteria are used to define the literature to be excluded from the study. The criteria were applied to ensure that the study is focused on the objective and to eliminate unnecessary literature [17]. The exclusion criteria are as follows:

- **a.** Publications outside the scope of the study topic and objectives.
- **b.** Non-academic literature.
- **c.** Publications not written in English.
- **d.** Redundant or duplicate studies.
- **e.** Complex AI studies without organisational or managerial links.

The review is clearly positioned to show the optimistic view of AI on the administrative effects; however, it also takes into account the critics and valid concerns regarding the issues with implementing AI.

C. Transparency and reproducibility

Transparency and reproducibility are two important aspects of the research process to ensure that adequate processes, rigor, and necessary considerations are in place and followed. However, traditionally, NLR allows authors to tell stories or provide detailed explanations about the topic under review based on the author's expertise. According to Paré and Kitsiou [32], NLR focuses less on extensive data extraction but more on thematic storytelling and qualitative synthesis. Nonetheless, given the different views of NLR, this study ensures that the following are applied to ensure transparency and reproducibility of its findings

a. **Search report and documentation:** A detailed literature search was done. These searches were conducted to select academic materials available on Scopus, Web of Science (WoS), and grey literature such as Google Scholar.
b. **Define eligibility criteria:** A clear set of eligibility criteria was established. This includes defining the inclusion and exclusion criteria as provided above.
c. **Acknowledge limitations:** Identify any biases in research interest and topic; rather, the focus should be on publication to improve quality.
d. **Reference software:** Apply reference management software to track and store the used citations. The researchers used Endnote software in tracking and exporting used articles into the library toward promoting reproductivity of its findings.

V. HOW AI ENHANCES MANAGEMENT CAPABILITIES

Across African companies and public institutions, AI is moving from pilots to targeted deployments that augment managerial work, especially in analytics-driven decision-making, operational productivity, strategic planning, competitive intelligence, and innovation management. Recent reviews and sector studies converge on the view that AI, when paired with data governance and skills development, improves performance outcomes and supports inclusive growth [1] [5]. The evidence focused on Africa is now visible in manufacturing, finance, supply chains, and public health logistics, illustrating measurable gains in quality and service reach [18].

a. **Enhanced decision-making:** Many managers make use of machine learning to make decisions based on complicated and dynamic data. Explainable machine learning and model risk management have improved South Africa's credit ecosystems [19]. This helps managers meet governance obligations and defend lending decisions. At the macro level, systematic reviews show that AI in supply chain management (SCM) strengthens managerial choices through demand forecasting, anomaly detection, and inventory optimisation, provided that data quality and integration are addressed [20]. Customised machine learning credit scoring helps managers better oversee small file customers in the banking sector in Africa and Small and Medium Enterprises (SMEs) finance. This type of support reduces risk and expedites access to more working capital.
b. **Improved operational efficiency and productivity:** Examples taken from South African manufacturing illustrate the successful application of AI to increase productivity and quality, as well as optimise the supply chain, in a way that efficiency gains are physically identified at the factory and network levels [18]. Moreover, in logistics and health, AI-enabled forecasting and allocation are currently increasing the service level: a 2025 review has unveiled AI's role in vaccine supply chain planning in African environments that propels demand prediction, routing, and cold chain risk management, which are the causes of wastage and stockout reduction [21].
   The same is true for bank operations in Africa, where efficiency improvements are also reported. For instance, it is expected that the Natural Language Processing (NLP) chatbot, along with predictive analytics, will lessen the number of queries that cause the accumulation of awaiting user requests and, at the same time, will prompt transaction handling, thus speeding up the process so the manager would be free to utilise staff-dedicated tasks of greater value instead [1]. The situation in South African SMEs is described as a positive turn: qualitative research finds that generative-AI tooling fastens content creation, customer engagement, and back-office automation, which, in this way, stimulates productivity in resource-constrained environments [22].
c. **Implications for managers:** Start with low-effort, high-impact, and more specifically defined tasks (forecasting, scheduling, triage, anomaly detection) that deal with data, and then move towards optimising complex processes in which you can measure throughput, error rates, and service times with defined KPIs [18] [21].
d. **Strategic planning and competitive intelligence:** Artificial Intelligence expands a manager's horizon scanning by interpreting and analysing unstructured data (news, filings, reviews) and structured data (for instance, prices, macro data, telemetry) into meaningful signals on market entry, pricing, and risk. An in-depth examination indicates that AI contributes to the implementation of dynamic capabilities of sensing, sense, seize, and reconfigure [1]. In the financial world, an increased focus on model risk and compliance is a significant strategic jump plan to implement AI through credit, fraud, and customer lifetime analytics [19]. At the national and sectoral levels, Africa-focused studies highlight that AI readiness and policy coherence within a country directly influence competitive outcomes. This provides important guidance to managers about ecosystem risk (skills, infrastructure) and collaboration [23].
e. **Innovation and product-development acceleration:** AI brings about an innovation acceleration primarily by significantly shortening the discovery and iteration cycle times; for example, rapid customer-journey analysis, idea screening, and simulation. Innovation in African economies that is driven by studies links digital/AI

transformation to productivity through new product and process innovation pathways [24]. In the case of inclusive finance, ML-based scoring and risk assessment tools facilitate the creation of new products for segments of the population that are not served by the traditional banking system, thus unlocking the potential of the market [25]. Meanwhile, sectoral work on renewable-energy supply chains shows that AI-assisted dynamic planning can simplify the installation process, which is an example of AI. Scale up the new solution architectures within African settings [26].

VI. ORGANISATIONAL AND SYSTEMIC BENEFITS OF AI IN BUSINESS

Artificial intelligence is transforming the manner in which businesses conduct business, handle information, and provide value in all fields in a complete transformation. AI acts as a driver and structure of organisational change, whether in financial management or customer interaction. The literature explains that AI not only leads to the promotion of automation, but also fosters the development of data-driven strategies, organisational responsiveness, and inclusive business processes. In this section, the systemic advantages of AI adoption are discussed in an organisational dimension, in the form of monetary optimisation, customer interaction, human resource creation, and cross-functional integration.

a. **Management optimisation:** AI has brought considerable improvements to financial management by improving the accuracy and efficiency of decision-making. With the help of Machine Learning algorithms, companies can predict their financial trends, identify fraud, and control their resources more effectively. Butson and Spronken-Smith [27] observed that real-time budgetary planning and cost savings, which can be achieved using AI-based predictive analytics, lead to less human error and increased accountability. In addition, robotic process automation (RPA) eliminates monotonous accounting processes and liberates financial departments so that they can focus on strategic projects by automating these processes. Increased transparency and real-time data reporting due to the integration of AI in enterprise resource planning (ERP) systems leads to better financial governance.

b. **Transformation of customer engagement:** The greatest advancement has been made in customer engagement due to AI. AI-driven customer relationship management (CRM) systems allow organisations to provide hyper-personalised interactions and predictive recommendations, enable round-the-clock responses, and enhance customer satisfaction. Predictive AI models are used to predict requirements and provide proactive delivery of the service by examining how a customer behaves. This has transformed marketing approaches so that firms can no longer be reactive in their marketing but must be anticipatory in order to foster loyalty and enduring value.

c. **Human resource management improvement:** AI has transformed human resource management through the simplification of recruitment, employee growth, and performance analysis. Automated systems eliminate bias. Enhance the quality of hires by helping with screening. AI-based applications, such as predictive analytics, can enable organisations to enhance their processes. Organisations must implement proactive retention initiatives by detecting the risks of employee turnover. In addition, AI-based learning systems will be able to customise training to suit each employee and create ongoing skill growth and interaction. Systematically, these tools will contribute to more data-driven and adaptive HR functions, matching workforce planning to organisational strategy. Functions, matching workforce planning to organisational strategy.

d. **Cross-functional coordination improvement:** AI enhances cross-functional coordination by means of organisational data integration across departments. Unified access is available as real-time analytics dashboards, providing advice to decision-makers in the fields of marketing, operations, and logistics, leading to improved collaboration. Research demonstrates that the speed of communication and the accuracy of information are enhanced with the assistance of data democratisation via AI. Teams quickly adapt to commercialise adjustments via AI-driven process management tools, thereby building organisational agility and innovation.

e. **Democratisation of business tools for SMEs:** AI has introduced sophisticated business applications to the masses, for instance, small and large businesses (SMBs). AI solutions based on the cloud, such as Cloud AI from Google and Azure AI from Microsoft, create predictive analytics, automation, and data visualisation that are more cost-effective for organisations. This accessibility has facilitated SMEs to compete on equal terms with larger organisations in AI-based marketing, logistics, and customer engagement. It is emphasised that reports indicate that barriers to entry can be reduced with the help of AI innovation, which helps organisations become more digital. Democratisation has been fundamental in promoting competition and sustainable growth in most industries.

f. **Inclusive growth and development:** Inclusivity also grows due to AI-driven transformation because it offers more opportunities to underserved groups and emerging markets. Automation, when combined with human upskilling programmes, leads to gains in productivity without disproportionate displacement of labour. AI fosters equal participation in the online economy by providing access to information, improving service delivery, and fostering entrepreneurship. In addition, AI-based educational technologies support workforce readiness and lifelong learning, which are vital for sustainable development in the Fourth Industrial Revolution.

VII. AI IN BOTH A POSITIVE AND NEGATIVE TRANSFORMATION CATALYST FOR EMERGING AFRICAN MANAGERS

The economy of Africa as a whole is made up of young people, making it easier to use AI responsibly. Emerging managers under 40 years of age are digital natives who see technology as a means to increase creativity, teamwork, and advancement in society, not as a threat. This advantage should be used to develop managers who are skilled in the ethical and strategic use of AI. African managerial environments are based on relationships and social principles such as Ubuntu, which focus on collaboration, empathy, and good outcomes for the community. When this is combined with AI's analytical power, these values can create a new kind of management that combines data-driven accuracy with human intuition. Due to this, our group believes that AI adoption should be done in a way that is specific to Africa: contextualised, ethical, and focused on development [6]. Towards a balanced and contextual AI narrative in Africa, we must consider the positive and negative transformative forces of AI that affect managerial functions in and outside African organisations.

A. AI as a positive transformation catalyst

The discussion of AI in the higher levels of business leadership has fluctuated constantly. Sometimes it is viewed as a great tool that can help people be efficient, but at times it is looked down upon. Some scholars have looked at the story of the AI revolution, and some of them see AI as a big help in the business world; others, on the other hand, see it as a threat to people's jobs and privacy, which managers have been in charge of until now. Our group uses the positive transformation paradigm as a logical way to explain that middle ground. The digital transformation is spreading rapidly across Africa, and the people who run African companies are not only knowledgeable about technology but also obsessed with it. That means AI is not only helping the continent get back on its feet, but it is also a source of technological advancement, which is the process of quickly overcoming traditional issues with infrastructure, so that innovation can happen right away [4].

Therefore, rather than causing harm, AI enhances capabilities that improve managerial skills, expand the boundaries of data-based research, and encourage social and economic involvement through participation in the global market [1]. A study conducted in Kenya, Nigeria, and South Africa, collecting data from the agriculture, banking, and logistics sectors, showed that the strategic adoption of AI positively impacts the outcomes of forecasting, planning, and resource allocation activities [18] [21].

B. AI as a negative transformation catalyst

Many people believe that the use of AI can cause more unemployment, reduce the appreciation of human labour, and make the gap between rich and poor countries even greater [28]. However, these problems are mostly caused by bad governance, not by problems with technology itself. The issues surrounding algorithms and the lack of creativity are true, but can be mitigated through clear regulations and ethical supervision. Africa's growing position has advantages because many countries are still working on their AI frameworks and can include accountability, fairness, and transparency from the start.

Regardless of negative views, new African research shows that AI increases rather than decreases managers' performance. Machine learning and predictive analytics are now very important for making data-driven decisions in finance, healthcare, and agriculture [19]. Managers who used to make decisions based on insufficient data can now make faster and more informed decisions. AI-powered credit and risk assessment systems in Nigeria's banking sector have lowered the number of bankruptcy claims and made it easier for small businesses to secure loans. This has given managers much more confidence [25]. South African manufacturers that use AI-based predictions have reported productivity gains of more than 20percent [18]. Eastern African logistics and transport companies also benefit from predictive maintenance, which reduces costs and makes their services more reliable [21]. The results show that AI improves managers' skills, encourages new ideas, and helps them remain flexible in their plans. This helps new African managers make smart, creative, and agile choices in changing situations [1] [26].

Although these are good things, it is important to remember that AI's success in Africa depends on strong governance frameworks. When there aren't any clear ethical rules, data protection laws, or ways for professionals to be held accountable, people might misuse the information or not trust it. However, this lack of governance is not a reason to say no to AI; it is a chance to come up with new ideas responsibly. Kenya's draft National AI Strategy and South Africa's AI ethics framework are examples of regulatory policies in Africa that show that regional organisations are already moving towards responsible governance.

VIII. IMPLICATIONS FOR HIGHER EDUCATION

The skills needed by aspiring managers are changing due to the rapid adoption of AI in African enterprises. Higher education institutions are essential to help students prepare for and benefit from this technological revolution [29]. AI can be introduced in universities to provide prospective managers with a competitive advantage. The benefits of AI include, but are not limited to, better decision-making, operational effectiveness, and strategy. Institutes can create digitally literate managers who can use AI technologies to enhance innovation, streamline operations, and anticipate market changes by introducing AI into management courses. In addition, correspondence can be improved by incorporating AI in the classroom, bridging the gap between theoretical knowledge and its practical application. Universities may provide students with hands-on practice in applying AI in the context of real business through case studies, simulations, and AI-based projects. In addition to technical expertise, this experiential training develops critical thinking, problem-solving, and adaptability skills, which

managers in dynamic African markets must possess [30] [31].

The proposed intervention will adhere to the principles of improving AI literacy in the curriculum by using the three dimensions of AI learning: knowledge, skills, and attitudes (KSA). Improving Curriculum through AI Literacy. The suggested intervention will be based on the principles of improving AI literacy in the curriculum through the three dimensions of AI learning: knowledge, skills, and attitudes (KSA). AI literacy is the foundational block of modern management education. To help students understand the technical and strategic elements of artificial intelligence, the courses must present them with machine learning, automation, predictive analytics, and what are commonly referred to as decision-support systems. New managers who have this kind of knowledge will be in a better position to critically assess AI-generated insights and make prudent decisions, as well as employ technology to create real company value.

Additionally, AI literacy reduces the dependence on intuition, as it empowers students to filter out relevant data and actions. Promote data-driven thinking, which is a much-needed skill for modern African managers who must spend resources in the most efficient manner when responding to market changes in the shortest time possible.

A. Addressing negative perspectives

Higher education institutions must train students to embrace technology by focusing on AI literacy, including its spread and positioning.

a. **Incorporating responsible AI practices and ethics:** Managers are expected to be capable of making morally and socially responsible decisions. The ethical and responsible use of AI in management should be part of the curriculum. Students are expected to study topics such as algorithmic bias, data privacy, transparency, and the overall effects of AI on society to develop a mindset that is both creative and responsible.
b. **Motivating experiential learning:** Practical experience is a critical part of the use of AI. Universities can also provide students with the experience of working with tools and data in real commercial contexts through internships, group projects, and simulations built using AI [3]. The experiential approach assists in the production of novel techniques and problem-solving skills in a non-threatening environment and enhances managerial competencies. In addition, experiential learning improves collaborative problem-solving and teamwork. To successfully use AI solutions in organisations, students gain an understanding of the challenges and opportunities associated with the introduction of AI [30] [31]. Universities are capable of producing managers who can fill the gap between theory and practice by modelling real-life business scenarios.
c. **Supporting contextual and inclusive AI education:** To ensure relevance and inclusiveness, education must be localized in the African business context. It becomes easier to understand how AI can be used to address context-specific issues for students. There are problems with local case studies, AI applications that are culturally sensitive, and regional economic facts. This plan encourages regional innovation and provides equitable access to information. Contextual education is also helpful to enable students to identify and mitigate the biases present in current AI technologies around the world. Through universities, managers can develop and adopt AI solutions that support different African communities through promotion. It will involve inclusive learning, which promotes social responsibility and technological innovation [30] [31].
d. **Enhancing university-industry cooperation:** Business partnerships are important in bridging the gap between theory and practice in the real world. African companies, AI groups, and universities can collaborate to provide internships, mentoring, and the use of state-of-the-art AI tools [3]. Students will understand the strategic value of AI in real-life business activities due to this interaction. It is also easier to work together and develop AI solutions that fit African scenarios. As students develop skills in the implementation of AI strategically and ethically, they also enable other industries in the area to be more innovative. This is because this academic-industrial partnership improves employability and prepares managers to lead AI-driven businesses successfully.
e. **Developing a sustainable AI ecosystem in higher education:** The development of an AI ecosystem should be based on effective governance structures, faculty education, and facility building. Universities will have to invest in technology laboratories, research projects, and professionalism to help students and teachers use AI tools effectively. Those programmes that are well supported ensure that AI is accepted in the long term and that its managerial and educational benefits are maximized. In addition, healthy ecosystems encourage cross-sector collaboration between government, business, and academic institutions, which contributes to continuous innovation and skill development. Institutions train managers with the ability to apply AI at the forefront through the integration of this technology with AI literacy, ethical, and applied learning in their curriculum. This drives innovation, competitiveness, and inclusive development in all of Africa.

IX. CONCLUSION AND FUTURE STUDIES

Artificial Intelligence is changing the African business environment and bringing new concepts to thinking, strategy, and leadership. AI can provide future managers with tools to improve the decision-making process, simplify work, and activate innovation. The automation of activities and the forecasting of information have made AI a fundamental element to remain competitive in the contemporary business environment in the African context. However, this massive technological progress comes at a very steep cost. The regulatory systems in Africa are not keeping up with the rapid diffusion of AI. This is the reason why there has been a risk-prone situation and there has been no resolution to

ethical and legal concerns. If systems are not in place to accommodate these risks, the same technology that can be progressive will, by default, breed new forms of inequality or discrimination.

The greatest priority that Africa should have is, therefore, AI governance based on a moral platform guaranteeing accountability, inclusiveness, and transparency. Businesses, schools, and governments should unite and provide simple rules that would protect citizens while stimulating innovation. The introduction of boards to normalize AI ethics, the promotion of digital literacy, and the increase in cooperation between policymakers and technology innovators are among the most crucial measures. For future research prospects, academics should investigate how managers navigate technostress when dealing with the high wave of AI evolution in Africa. Furthermore, academics can investigate in the future how organisations in Africa can formulate governance models (frameworks) to tackle ethical issues such as algorithmic bias, data privacy, plagiarism, and ethical decision-making. In addition, research can focus on finding the competencies and skills necessary for African managers to use AI in driving the decision-making process to improve performance and operational functions. Other future investigations can look at how to effectively use AI for inclusive growth and facilitate SMEs' growth while eliminating inequality in African management processes and economies.

REFERENCES

[1] J. Amankwah-Amoah and Y. Lu, "Harnessing AI for business development: a review of drivers and challenges in Africa," Production Planning & Control, vol. 35, no. 13, pp. 1551-1560, 2024.

[2] J. E. Ataguba, "Changes in socioeconomic inequality in self-assessed health in South Africa: The contributions of changes in inequalities between and within socioeconomic groups," SSM-Population Health, vol. 29, p. 101755, 2025.

[3] CIPIT. "The State of AI in Africa Report." The Centre for Intellectual Property and Information Technology Law (CIPIT). [retrieved: November, 2025] https://cipit.strathmore.edu/the-state-of-ai-in-africa-report/ (accessed.

[4] N. Ndung'u and L. Signé, "The Fourth Industrial Revolution and digitization will transform Africa into a global powerhouse," 2020.

[5] I. D. Mienye, Y. Sun, and E. Ileberi, "Artificial intelligence and sustainable development in Africa: A comprehensive review," Machine Learning with Applications, vol. 18, p. 100591, 2024.

[6] N. Adeleye, E. Osabuohien, and E. Bowale, "The role of institutions in the finance-inequality nexus in Sub-Saharan Africa," Journal of Contextual Economics–Schmollers Jahrbuch, no. 1–2, pp. 173-192, 2017.

[7] K. Banga and D. W. te Velde, "Digitalisation and the future of African manufacturing," Supporting Economic Transformation, 2018.

[8] H. J. Wilson and P. R. Daugherty, "Collaborative intelligence: Humans and AI are joining forces," Harvard business review, vol. 96, no. 4, pp. 114-123, 2018.

[9] A.-S. T. Olanrewaju, M. A. Hossain, N. Whiteside, and P. Mercieca, "Social media and entrepreneurship research: A literature review," International journal of information management, vol. 50, pp. 90-110, 2020.

[10] G. Paré and S. Kitsiou, "Methods for literature reviews," in Handbook of eHealth evaluation: An evidence-based approach [Internet]: University of Victoria, 2017.

[11] N. R. Haddaway et al., "Eight problems with literature reviews and how to fix them," Nature Ecology & Evolution, vol. 4, no. 12, pp. 1582-1589, 2020.

[12] H. Suri and D. Clarke, "Advancements in research synthesis methods: From a methodologically inclusive perspective," Review of Educational Research, vol. 79, no. 1, pp. 395-430, 2009.

[13] B. M. Silva, J. J. Rodrigues, I. de la Torre Díez, M. López-Coronado, and K. Saleem, "Mobile-health: A review of current state in 2015," Journal of biomedical informatics, vol. 56, pp. 265-272, 2015.

[14] M. Pautasso, "The structure and conduct of a narrative literature review," A guide to the scientific career: Virtues, communication, research and academic writing, pp. 299-310, 2019.

[15] D. Tranfield, D. Denyer, and P. Smart, "Towards a methodology for developing evidence‐informed management knowledge by means of systematic review," British journal of management, vol. 14, no. 3, pp. 207-222, 2003.

[16] R. F. Baumeister and M. R. Leary, "Writing narrative literature reviews," Review of general psychology, vol. 1, no. 3, pp. 311-320, 1997.

[17] M. J. Grant and A. Booth, "A typology of reviews: an analysis of 14 review types and associated methodologies," Health information & libraries journal, vol. 26, no. 2, pp. 91-108, 2009.

[18] M. L. Nzama, G. A. Epizitone, S. P. Moyane, N. Nkomo, and P. P. Mthalane, "The influence of artificial intelligence on the manufacturing industry in South Africa," South African Journal of Economic and Management Sciences, vol. 27, no. 1, pp. 1-10, 2024.

[19] H. A. du Toit, W. D. Schutte, and H. Raubenheimer, "Integrating traditional and non-traditional model risk frameworks in credit scoring," South African Journal of Economic and Management Sciences, vol. 27, no. 1, p. 5786, 2024.

[20] G. Culot, M. Podrecca, and G. Nassimbeni, "Artificial intelligence in supply chain management: A systematic literature review of empirical studies and research directions," Computers in industry, vol. 162, p. 104132, 2024.

[21] S. M. Musa, U. A. Haruna, L. J. Aliyu, M. Zubairu, and D. E. Lucero-Prisno III, "Leveraging AI to optimize vaccines supply chain and logistics in Africa: opportunities and challenges," Frontiers in pharmacology, vol. 16, p. 1531141, 2025.

[22] A. Gawe and A. Gudyanga, "The impact of artificial intelligence (AI) on development studies' learners at one State university campus in Zvishavane, Zimbabwe," Cogent Education, vol. 12, no. 1, p. 2539217, 2025.

[23] M. D. Dzandu, S. T. Asiedu, B. Pathak, and S. De Cesare, "Artificial Intelligence Harm and Accountability by Businesses-A Systematic Literature Review'," in Proceedings of the 27th International Conference on Enterprise Information Systems, 2025: SCITEPRESS, pp. 1012-1019.

[24] E. Egbeleo and K. Sodokin, "Digital transformation, institutional quality and productivity in Sub-Saharan Africa," Cogent Economics & Finance, vol. 13, no. 1, p. 2519924, 2025.

[25] D. Kazimoto and S. Baadel, "Empowering Africa's Disfranchised SMEs: Machine Learning-Based Credit Scoring for Informal African Merchants," Human-Centric Intelligent Systems, vol. 5, no. 3, pp. 376-384, 2025.

[26] S. Bawa, "Leveraging artificial intelligence and dynamic supply chains for renewable energy development in Africa's frontier markets," Energy & Environment, p. 0958305X251375931, 2025.

[27] R. Butson and R. Spronken-Smith, "AI and its implications for research in higher education: A critical dialogue," Higher Education Research & Development, vol. 43, no. 3, pp. 563-577, 2024.

[28] M. C.-T. Tai, "The impact of artificial intelligence on human society and bioethics," Tzu chi medical journal, vol. 32, no. 4, pp. 339-343, 2020.

[29] A. B. Samuels and U. Singh, "Education reimagined: South Africa's journey through the 4IR and beyond," Transformation in Higher Education, vol. 10, p. 482, 2025.

[30] E. O. Arakpogun, Z. Elsahn, F. Olan, and F. Elsahn, "Artificial intelligence in Africa: Challenges and opportunities," The fourth industrial revolution: Implementation of artificial intelligence for growing business success, pp. 375-388, 2021.

[31] F. Azaroual, "Artificial intelligence in Africa: challenges and opportunities," Policy Brief. PB, pp. 23-24, 2024.

[32] G. Paré, and S. Kitsiou, "Methods for literature reviews. In Handbook of eHealth evaluation: An evidence-based approach [Internet]". University of Victoria, 2021