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*Richard Douglas Kamara*

## **BRIDGING THE GAP: OPPORTUNITIES, CHALLENGES AND STRATEGIES FOR AI DEPLOYMENT IN PUBLIC SERVICE DELIVERY**

*Artificial intelligence (AI) has the potential to revolutionise public service delivery, but its creation and implementation come with both exciting possibilities and complex obstacles. Despite the increasing discussions surrounding AI, there is a lack of research specifically focused on its implications within public service sectors, healthcare, education, and transportation. This paper aims to fill this gap by critically examining how AI can enhance efficiency, decision-making, and service accessibility while also exploring the hurdles posed by its implementation, including technical infrastructure requirements, workforce adaptation, ethical concerns, and governance complexities.*

*By conducting a thorough analysis of existing research, the study uncovers significant opportunities, including enhanced accessibility, data-driven insights, and streamlined operations. At the same time, it emphasises significant challenges, such as algorithmic bias, data privacy risks, public trust deficits, and resource disparities that may impede the equitable adoption of AI. To tackle these obstacles and promote responsible AI deployment, this paper examines strategic approaches that encompass establishing transparent governance frameworks to ensure accountability, enhancing data privacy and security protocols to safeguard public information, and fostering AI literacy through comprehensive*

*workforce training. Moreover, it seeks to echo the importance of ethical AI development aimed at addressing bias and fostering inclusivity, while ensuring that AI solutions are in line with societal requirements. Building scalable and inclusive AI infrastructure is crucial for closing the digital divide and guaranteeing fair access to AI-powered services, especially in marginalised communities. Additionally, building public trust by implementing transparent policies and actively involving citizens in the adoption process is vital for the successful integration of AI. Given the scarcity of research on AI's impact on public service delivery, this paper offers valuable insights to inform policymakers, public administrators, and stakeholders in effectively navigating the challenges associated with AI adoption. By providing a detailed analysis of the advantages and potential challenges, and by suggesting effective implementation strategies, the study seeks to improve governance practices in the digital era, promoting fairness and inclusivity.*

**Keywords:** *artificial intelligence (AI), public service delivery AI potential challenges, AI opportunities, AI deployment strategies, AI deployment challenges, AI ethics, data-driven decisions.*

**Introduction.** Artificial intelligence (AI) is rapidly transforming how public services are conceived, designed, and delivered. AI has the potential to revolutionise public services by automating repetitive tasks, empowering decision-making processes, and ultimately improving the efficiency, accessibility, and quality of these services. In the provision of essential services like healthcare, education, transportation, and public safety, AI-driven innovations hold the potential to bring about significant improvements that could help bridge gaps in service delivery and tackle long-standing societal issues.

Realising the substantial influence of artificial intelligence and emerging technologies on economic and strategic development, Donald Trump's presidency positioned AI as a foundational pillar and pivotal driver of national growth and development. His administration unveiled a half-trillion-dollar initiative aimed at establishing the infrastructure required to secure U.S. dominance in artificial intelligence for years to

come. This ambitious project, beginning with the construction of a cutting-edge data centre in Texas, underscored the administration's dedication to promoting innovation and positioning the United States as a global leader in artificial intelligence advancements.

Nevertheless, the integration of artificial intelligence in public service also presents a multitude of challenges that cannot be overlooked. These challenges encompass technical, ethical, and operational obstacles, such as guaranteeing equal access to AI-driven services, protecting data privacy, addressing algorithmic biases, and enhancing the technical capabilities of public institutions. Moreover, the absence of well-defined governance structures and the fast-paced nature of artificial intelligence (AI) development pose significant challenges for policymakers, prompting them to address crucial issues such as accountability, transparency, and public trust.

**Formulation of the objectives of the article (statement of the task).** This paper seeks to explore the dual nature of AI's impact on public service by examining the opportunities it presents for enhancing governance and service delivery alongside the challenges that accompany its deployment. By analysing existing literature, case studies, and governance models, the paper aims to provide a balanced understanding of AI's potential and limitations in the public sector. It highlights the need for strategic planning, ethical oversight, and collaborative efforts among stakeholders to fully harness AI's benefits while addressing its risks. In doing so, this study contributes to the broader discourse on responsible AI integration in public service, offering insights that are both timely and relevant in a rapidly evolving technological landscape.

**Presentation of the main research material.** AI, or artificial intelligence, is a branch of computer science that focuses on creating intelligent systems capable of performing tasks that typically require human intelligence [25; 45]. Artificial intelligence involves the development and deployment of algorithms and techniques that enable machines to simulate and exhibit cognitive abilities, problem-solving skills, and decision-making capabilities [5; 10].

Artificial intelligence (AI) in the public sector encompasses the deployment of advanced algorithms and intelligent systems to stream-

line government functions, enhance service delivery, and aid in decision-making [55; 57]. This includes leveraging technologies such as machine learning, natural language processing, computer vision, and robotics to automate processes, interpret complex data, and provide actionable insights.

The rapid proliferation of artificial intelligence (AI) presents transformative opportunities for the public sector, offering tools to improve service delivery, refine decision-making, and optimise the use of resources [61]. Governments are increasingly utilising artificial intelligence (AI) to address complex problems, enhance citizen satisfaction, and promote socioeconomic development. The following case studies highlight various artificial intelligence (AI) initiatives aimed at improving service delivery in the public sector.

Globally, healthcare analytics demonstrates revolutionary capacity. In the UK, the NHS employs AI tools, such as DeepMind's Streams, to predict and prevent conditions like kidney failure, reducing hospital admissions and saving lives [53]. In India, AI platforms like Netra AI tackle diabetes by crafting personalised care plans and optimising treatment approaches [33; 47]. Similarly, Israeli companies like Medtronic and Tyto-care integrate advanced analytics into wearable devices, enabling tailored care for chronic illnesses such as hypertension and heart disease [22; 26].

Healthcare analytics is driving advances in personalised and precision medicine by tailoring treatments to individual patients based on their genetic profiles, lifestyles, medical histories, and environmental factors. By integrating data from Electronic Health Records (EHRs) and other sources, healthcare analytics helps improve patient outcomes, detect trends, and support clinical decision-making, ultimately leading to cost savings for providers [20].

The widespread implementation of Electronic Health Records (EHRs) has become a fundamental aspect of the healthcare analytics industry, greatly improving patient care and lowering expenses. In South Africa, healthcare providers increasingly rely on EHR systems to efficiently capture, store, and share medical information [29].

Chatbots such as ChatGPT, Microsoft Bing, and google bard are transforming the way governments gather, analyse, and utilize data to

improve policy implementation and service delivery [56]. Over the past few years, public institutions have increasingly turned to ai-driven virtual agents and chatbots to support customers, service providers, and internal staff [64].

In South Africa, the city of Cape Town introduced a WhatsApp chatbot to enhance service delivery, enabling residents to track service requests and stay informed through their preferred messaging platforms [17]. Similarly, the Singaporean government employs chatbots to provide up-to-date information during emergencies such as the covid-19 pandemic and to assist citizens with various inquiries.

Although these advancements show great potential, ethical concerns, such as transparency, fairness, privacy, and accountability, still need to be addressed. Addressing these issues is crucial to guarantee the responsible and fair implementation of artificial intelligence (AI) technologies in healthcare [48].

The use of artificial intelligence in predictive maintenance is revolutionising infrastructure management across different sectors globally. For example, Japan's high-speed Shinkansen rail system incorporates Iot sensors and AI algorithms to monitor tracks and train components, resulting in fewer delays and enhanced passenger safety [54]. Similarly, in Germany, cities like Hamburg employ Iot-enabled solutions to manage water pipelines, using pressure and flow rate data to detect leaks, enhancing operational efficiency and cutting costs [28]. These examples illustrate the substantial influence of AI-driven solutions in guaranteeing the sustainability and efficiency of infrastructure systems.

Experts emphasise the crucial role of predictive maintenance systems in enabling maintenance managers to make well-informed, data-driven decisions that protect assets and ensure network uptime. Real-time condition monitoring enables early issue detection, while remote inspections reduce risks in hazardous environments [16; 21].

In South Africa, AI-driven predictive maintenance systems are transforming the way infrastructure is managed. The South African National Roads Agency (SANRAL) is utilizing this technology to improve road maintenance [39]. By examining data on road usage, weather conditions, and previous maintenance efforts, these systems can anticipate potential

deterioration, enabling proactive measures to be taken. By adopting this strategy, the likelihood of road failures decreases, traffic disruptions are minimized, infrastructure durability is prolonged, and motorist safety is improved.

**Methodology.** The study primarily utilized secondary data that was purposefully and systematically selected, as it was deemed relevant and aligned with the research objectives. The step-by-step process of conducting a systematic literature review in this research is as follows: (1) identifying relevant studies, (2) selecting appropriate studies, (3) evaluating the relevance of the selected studies, and (4) synthesizing the data obtained from the studies. A comprehensive account of each stage in the research process is provided below.

**Step 1: Recognition of Research.** The initial phase of this research required defining specific goals and inquiries that served as the foundation for the literature review. The goals were created to investigate the possibilities and difficulties linked to the advancement and implementation of artificial intelligence (ai) in the public sector. The objective was to integrate the research findings into the existing body of knowledge and provide a comprehensive understanding of the advantages and challenges governments encounter when implementing artificial intelligence technologies. To accomplish these goals, the following research questions were developed:

a) What are the key opportunities and challenges in developing and implementing artificial intelligence (AI) in public service?

b) What strategies and governance frameworks are necessary to ensure that artificial intelligence is used responsibly in the public sector?

To address these questions, the author employed three primary databases – Web of Science, Scopus, and Google Scholar – to locate pertinent scientific literature. These sources were selected due to their extensive coverage of peer-reviewed studies and their alignment with the research focus on artificial intelligence in public governance.

**Step 2: Choice of Research.** The search process concentrated on scholarly articles and conference papers published between 2019 and 2025, written in English, and obtained from reputable sources such as the Web of Science, Scopus, and the digital government references li-

brary (DGRL). The scope was narrowed down by focusing on specific research areas to guarantee the relevance of the results. Scopus and web of science classify research fields in various ways. For Scopus, the search was limited to four fields: social sciences, decision sciences, multidisciplinary, and business, management, and accounting. For the Web of Science, the emphasis was on ten fields: public administration, library/information science, political science, management, communication, multidisciplinary sciences, engineering multidisciplinary, international relations, and telecommunications.

The search strategy was executed in two stages. In June 2024, an initial search was performed to identify studies on the potential risks and implications of ai in public governance. This yielded 105 papers: 40 from Web of Science, 35 from Scopus, and 30 from the DGRL. For latter, only the top 25 most relevant results (as determined by the database) were selected.

Given the increasing focus on AI research and its implications for public governance, the search was updated in January 2025 to capture recent developments. This yielded additional results: three new papers from web of science, four from Scopus, and one from the DGRL. To further ensure inclusivity, a supplementary search was conducted on Google Scholar, examining the first 50 results using keywords such as «ai», «artificial intelligence governance», «artificial intelligence policy» and «artificial intelligence government policy». However, this search did not yield new results, several papers already identified in Web of Science, Scopus, and the DGRL also appeared in Google Scholar.

After eliminating and combining duplicate entries, the final dataset consisted of 70 distinct studies out of the initial 108 identified. This thorough and targeted approach guaranteed a comprehensive and relevant collection of literature for the study.

**Step 3: Study Relevance and Quality Assessment.** The third step in the systematic literature review process involved assessing the relevance and quality of the selected studies. This phase was divided into two key stages. First, the Author reviewed the titles and abstracts of the 70 identified studies to evaluate their relevance. Three criteria were applied during this initial screening:

- AI Focus: the study had to feature AI as a substantial or major component of its research questions or objectives. Studies where AI played a minor or secondary role were excluded;
- Public Governance Context: the study needed to address AI within the context of public governance (or the public sector). Articles that did not discuss AI in this context were removed;
- Core Governance Implications: the study had to focus on the implications of AI use in public governance. Studies that only mentioned AI in passing or did not link it to public governance were excluded.

After a careful and iterative review of the abstracts, 40 studies were excluded for not meeting these criteria, leaving 30 studies to proceed to the next phase.

The second phase of the assessment involved a full-text review of the 35 remaining studies. This in-depth evaluation helped determine the final selection. Nine studies were excluded in this phase because they did not sufficiently explore AI's intersection with public governance. Ultimately, 21 studies were selected for inclusion in the review, as they directly addressed questions related to AI use in public governance (fig. 1).

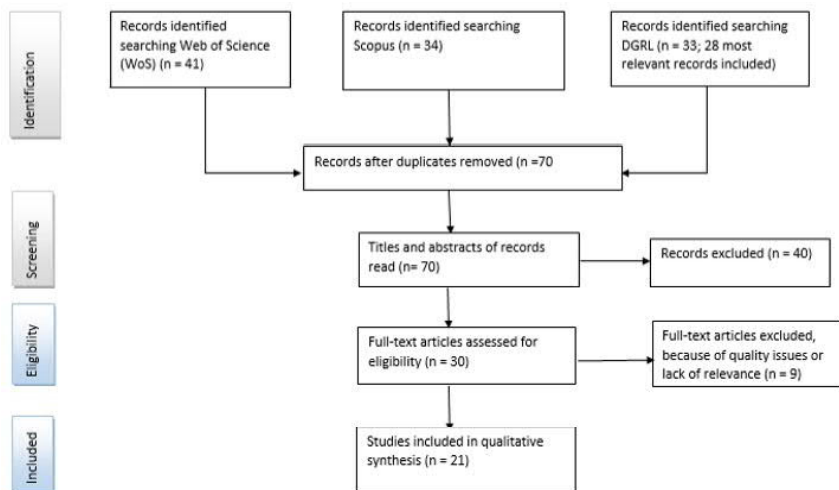
Step 4: Data Examination. The last stage of the research process included data examination. The information gathered during the literature review was carefully examined and organized, and the results are outlined in section 4. Thematic analysis was the main approach used to analyse the data.

**Results and Discussion.** This section presents the findings from the comprehensive analysis of the 25 relevant documents, organised according to the research objectives. Furthermore, it examines the following main topics: opportunities and challenges of AI in Public Service; strategies for the responsible, ethical, and efficient deployment of AI in the Public Service.

Opportunities and Challenges of AI Use in Public Service. The seamless integration of artificial intelligence (AI) in public service has become a powerful catalyst for change, offering significant possibilities while also presenting some intricate challenges. As governments worldwide seek to modernise service delivery, artificial intelligence (AI) presents promising opportunities for enhancing efficiency, improving de-



cision-making, and promoting inclusivity. Nevertheless, it also creates significant issues around prejudice, security and safety.



**Fig. 1.** Study selection, assessment, and inclusion  
 (presented using PRISMA flow diagram).

*Source: generated by the author*

The use and deployment of artificial intelligence (AI) in public service presents a multitude of transformative possibilities that can redefine the way governments interact with citizens, optimise resource allocation, and deliver personalised solutions. One of the main advantages is improved decision-making, as artificial intelligence systems can analyse and process vast amounts of data to provide data-driven insights. These valuable insights can greatly enhance resource allocation and policy decisions, resulting in more efficient and responsive public services [59]. For example, automating administrative tasks enables government workers to concentrate on strategic functions, enhancing productivity and service delivery.

Personalised service delivery is closely linked to the decision-making process. By utilising machine learning and predictive analytics, AI

can evaluate individual citizen profiles and suggest high-precision interventions customised to address specific needs, whether in healthcare, education, or social services [25]. This customisation results in improved results and higher levels of citizen contentment.

Furthermore, AI offers a chance to establish public trust by being transparent in its operations. By creating systems that can provide clear explanations for their decisions, governments can build trust among citizens about the fairness and impartiality of AI-powered services. Inviting transparency in algorithmic processes encourages more active participation from citizens and stakeholders [8]. Additionally, the transparent nature of AI promotes ethical governance and legal compliance, as it enables regulators to closely examine AI decisions and verify their alignment with public interest [42].

AI also plays a crucial role in improving public safety and data security. When embedded with robust cybersecurity protocols, AI systems can protect sensitive public data, enhance threat detection, and respond to breaches in real time, especially in critical sectors like healthcare and law enforcement [3; 7]. In this manner, AI contributes not only to operational resilience but also to the safety and integrity of public infrastructure.

Another promising dimension is improving inclusivity and social mobility. AI-powered public services can be made available to underserved populations, such as those living in remote or economically disadvantaged areas. These advancements in technology can minimise geographical and financial limitations, guaranteeing broader accessibility and fair distribution of public services [34]. Additionally, the AI economy presents opportunities for job creation and skill development, paving the way for high-skilled employment in fields such as data analysis, AI maintenance, and cybersecurity [60].

Although these potential advantages are promising, the implementation of AI in public service is accompanied by significant challenges that need to be addressed proactively. One of the primary concerns is the presence of bias and fairness in the situation. AI systems that are trained on biased datasets can lead to discriminatory outcomes, especially for marginalised groups like racial minorities or low-income populations. This bias can perpetuate existing disparities rather than address them

[31; 43]. To guarantee that AI systems promote equity, it is crucial to continuously monitor their impact, utilise inclusive datasets, and implement regulatory oversight [4; 18].

A related and equally complex challenge is the lack of transparency in many artificial intelligence algorithms. These systems often act as «black boxes», providing outputs without clearly explaining the reasoning behind their decisions. The lack of transparency and accountability makes it challenging to hold individuals and organisations responsible for their actions, hindering oversight and transparency efforts. Without clarity, public trust can plummet, especially when mistakes or biases are apparent.

Additionally, the legal and regulatory systems have not been able to keep up with the fast-paced advancements in artificial intelligence technologies. Numerous jurisdictions operate under fragmented or outdated legal systems that are ill-equipped to handle the complexities of artificial intelligence. The absence of regulations in this area allows for privacy infringements, ethical misconduct, and uneven enforcement of data protection laws [30; 44].

Data privacy is an important issue. While AI can enhance cybersecurity measures, it is also vulnerable to cyberattacks. AI algorithms can be manipulated or exploited, posing a threat to critical services and sensitive citizen data. Moreover, poor-quality data or flawed models can result in incorrect decisions, which could have far-reaching consequences in domains such as healthcare or criminal justice [14; 50; 62].

Another significant concern is the digital divide. Without intentional efforts to include diverse populations, artificial intelligence technologies may inadvertently exclude individuals who lack access to digital infrastructure or sufficient digital literacy skills. This digital divide could exacerbate social disparities and deprive marginalised communities of the advantages of AI-enhanced services [41].

Furthermore, job displacement is a significant socio-economic issue. Although AI has the potential to generate new employment opportunities, it may also replace low-skilled or repetitive tasks, particularly in administrative and support services. Without reskilling and upskilling initiatives, displaced workers may struggle to find relevant employment in the evolving job market [41].

Ultimately, the growing prevalence of artificial intelligence in automated decision-making prompts significant concerns regarding human supervision and ethical responsibility. As AI systems begin to influence life-altering decisions, such as eligibility for social benefits or policing priorities, it becomes imperative to ensure these systems remain subject to human judgment, legal scrutiny, and democratic values [60].

*Strategies for the Responsible, Ethical, and Efficient deployment and use of AI in Public Service.* The seamless integration of artificial intelligence (AI) into public service processes aimed at enhancing public service delivery requires the establishment of robust governance mechanisms and regulatory frameworks that guarantee responsible, ethical, and efficient deployment of AI systems. Governments can employ various strategies to harness the potential of artificial intelligence while effectively managing the associated risks [65].

The responsible deployment of artificial intelligence (AI) in public services hinges heavily on effective data governance. Governments need to create and institutionalise thorough systems for gathering, storing, safeguarding, and securing data, while also ensuring privacy protection. Clear definitions of data ownership, access rights, and data-sharing protocols are essential [36; 64]. The government needs to ensure high-quality, reliable, and diverse datasets that can enable AI systems to make better decisions, thus improving policy formulation and public service delivery [32]. By taking a proactive stance, the organisation reduces the potential for data mishandling or unauthorised access.

Imperatively, governments have to ensure that they have the right infrastructure in place to support artificial intelligence systems efficiently. This encompasses obtaining flexible computing resources, fast internet connections, and cloud-based services to meet the computational requirements of artificial intelligence algorithms [19]. Furthermore, allocating resources to enhance technical capabilities within government agencies and collaborating with AI experts can assist governments in addressing technical obstacles [61]. The level of technical readiness in the public sector is crucial for guaranteeing the smooth integration of AI systems into a wide range of services.

To ensure the responsible use of AI, governments must establish legal and regulatory frameworks for addressing crucial matters pertaining to data protection, algorithmic accountability, privacy and ethical considerations [6; 12]. These frameworks guarantee that AI technologies are in line with societal values and that AI decision-making processes are transparent, accountable, and unbiased. By implementing these regulations, governments can minimise the potential risks associated with the impact of artificial intelligence on privacy, fairness, and public trust [15; 23].

Developing literacy and technical skills within the public sector workforce is essential for achieving successful AI implementation. Governments should allocate resources towards training programs that emphasise data analytics, machine learning, and AI ethics [52]. This empowers government employees to interact proficiently with artificial intelligence technologies, guaranteeing that they possess the necessary skills to operate AI systems and manage data ethically. Partnering with academic institutions and industry experts will enhance ongoing learning and innovation in the application of AI within the public sector.

Governments should proactively involve a diverse group of stakeholders in the implementation of AI technologies. This encompasses individuals, non-governmental organisations, educational institutions, and professionals from various fields [32; 38]. Collaborative partnerships facilitate inclusive and transparent decision-making processes, building trust between the government and the public. Collaborating with ai experts guarantees that the government has access to the latest technologies and industry-leading practices [1].

Regular evaluation and impact assessment are crucial to guarantee that artificial intelligence systems are operating as intended and providing value to the public. Governments should establish frameworks to assess the effectiveness, fairness, and societal impact of artificial intelligence [64]. This encompasses assessing the precision and openness of artificial intelligence algorithms, as well as their impact on public services, citizen participation, and social fairness [46]. Feedback mechanisms, such as surveys and consultations with the public, should be integrated to evaluate the broader societal impact of AI and to ensure its accountability.

By implementing these strategies-emphasising data governance, technical readiness, legal frameworks, capacity building, stakeholder engagement, and continuous evaluation-governments can effectively navigate the complexities of deploying AI in the public sector. These mechanisms can help to guarantee that AI systems are used responsibly and efficiently, resulting in improved public services, increased societal well-being, and greater transparency in governance.

**Conclusion.** This study aimed to address two central research questions:

- a) What are the key opportunities and challenges in developing and implementing artificial intelligence (AI) in public service?
- b) What strategies and governance frameworks are necessary to ensure that artificial intelligence is used responsibly in the public sector?

To explore these questions, a synthetic literature review methodology was employed. This approach involved systematically collecting, analysing, and synthesising existing research to identify patterns, gaps, and emerging themes related to AI integration in public services. By aggregating findings from diverse studies, this method provided a comprehensive understanding of the current landscape and informed the development of nuanced insights and recommendations.

In response to the first question, the research identified several key opportunities that AI presents for public service. These include enhanced decision-making capabilities, increased efficiency, improved transparency, and greater citizen engagement. AI technologies can streamline operations, personalise services, and provide data-driven insights that inform policy and service delivery. However, the implementation of AI also introduces significant challenges. These encompass algorithmic biases, data security concerns, potential job displacement, and the risk of exacerbating existing social inequalities. Ensuring equitable access to AI benefits and maintaining public trust are critical issues that must be addressed.

Regarding the second question, the study underscores the necessity of robust strategies and governance frameworks to guide the responsible use of AI in the public sector. Key components of such frameworks include comprehensive data governance policies, transparent and ac-

countable AI systems, inclusive stakeholder engagement, and continuous evaluation of AI impacts. Developing AI literacy among public servants and the broader community is also essential to foster understanding and trust. Furthermore, aligning AI initiatives with ethical standards and legal regulations ensures that AI deployment serves the public interest and upholds democratic values.

In conclusion, the responsible integration of AI into public services requires a balanced approach that maximises its benefits while mitigating associated risks. By implementing thoughtful governance strategies and fostering an inclusive, ethical framework, public sector departments can leverage AI to enhance decision-making processes and promote the overall welfare of society.

## **ПОДОЛАННЯ РОЗРИВУ: МОЖЛИВОСТІ, ВИКЛИКИ ТА СТРАТЕГІЇ ВИКОРИСТАННЯ ШІ В НАДАННІ ДЕРЖАВНИХ ПОСЛУГ**

*Штучний інтелект (ШІ) має потенціал революціонізувати надання державних послуг, але його створення та впровадження пов'язані як із захопливими можливостями, так і зі складними перешкодами. Незважаючи на зростаючі дискусії навколо ШІ, бракує досліджень, спеціально зосереджених на його наслідках у секторах державних послуг, охорони здоров'я, освіти та транспорту. Ця стаття має на меті заповнити цю прогалину, критично дослідивши, як ШІ може підвищити ефективність, прийняття рішень та доступність послуг, а також дослідивши перешкоди, що виникають у результаті його впровадження, включаючи вимоги до технічної інфраструктури, адаптацію робочої сили, етичні проблеми та складність управління.*

*Проводячи ретельний аналіз існуючих досліджень, дослідження виявляє значні можливості, включаючи покращену доступність, аналітичні дані, засновані на даних, та оптимізовані операції. Водночас воно підкреслює значні проблеми, такі як алгоритмічна упередженість, ризики для конфіденційності даних, дефіцит довіри громадськості та нерівність ресурсів, які можуть перешкоджати*

справедливому впровадженню ШІ. Щоб подолати ці перешкоди та сприяти відповідальному впровадженню ШІ, у цій статті розглядаються стратегічні підходи, що охоплюють створення прозорих систем управління для забезпечення підзвітності, покращення протоколів конфіденційності та безпеки даних для захисту публічної інформації, а також сприяння грамотності у сфері ШІ шляхом комплексного навчання робочої сили. Крім того, вона прагне підкреслити важливість етичного розвитку ШІ, спрямованого на подолання упередженості та сприяння інклюзивності, водночас забезпечуючи відповідність рішень ШІ суспільним вимогам. Побудова масштабованої та інклюзивної інфраструктури ШІ має вирішальне значення для подолання цифрової нерівності та гарантування справедливого доступу до послуг на базі ШІ, особливо в маргіналізованих громадах. Крім того, зміцнення громадської довіри шляхом впровадження прозорої політики та активного залучення громадян до процесу впровадження є життєво важливим для успішної інтеграції ШІ. З огляду на недостатню кількість досліджень впливу ШІ на надання державних послуг, ця стаття пропонує цінні знання для розробників політики, державних службовців та зацікавлених сторін щодо ефективного подолання викликів, пов'язаних з впровадженням ШІ. Надаючи детальний аналіз переваг та потенційних викликів, а також пропонує ефективні стратегії впровадження, дослідження прагне покращити практику управління в цифрову епоху, сприяючи справедливості та інклюзивності.

**Ключові слова:** штучний інтелект (ШІ), надання державних послуг, потенційні виклики ШІ, можливості ШІ, стратегії розгортання ШІ, проблеми розгортання ШІ, етика ШІ, рішення на основі даних.

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### **Відомості про автора / Information about the Author**

Річард Дуглас Камара, доктор PhD в галузі знань публічне управління та адміністрування, науковий співробітник, Йоганнесбурзького університету, м. Йоганнесбург, Південна Африка. E-mail: [richard.douglas\\_dr@douqualiakademie.org](mailto:richard.douglas_dr@douqualiakademie.org), orcid: <https://orcid.org/0000-0003-1153-9215>.

Richard Douglas Kamara, Doctor of PhD in the field of public management and administration, Associate Researcher University of Johannesburg, Johannesburg, South Africa. E-mail: [richard.douglas\\_dr@douqualiakademie.org](mailto:richard.douglas_dr@douqualiakademie.org), orcid: <https://orcid.org/0000-0003-1153-9215>.

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