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AI GOVERNANCE IN BANGLADESH: A CRITICAL EVALUATION OF THE TRANSITION FROM STRATEGIC VISION TO POLICY FRAMEWORK

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Abstract

This article critically evaluates the progression of Bangladesh's Artificial Intelligence (AI) governance, focusing on the transition from the National AI Strategy 2020 to the Draft AI Policy 2024. The 2020 Strategy set the foundation for AI-driven national development, though it lacked specific implementation mechanisms. The Draft AI Policy 2024, however, introduces more concrete frameworks centered on regulation, ethics, data governance, and capacity building. By comparing these policy documents, the article highlights Bangladesh's efforts to balance innovation with responsibility, addressing challenges such as ethical AI use, data privacy, and workforce development. This analysis reflects the country's commitment to aligning AI governance with global standards while fostering sustainable and inclusive AI adoption.

Keywords: Artificial Intelligence (AI), AI Governance, National AI Strategy of Bangladesh, National AI Policy of Bangladesh, AI In Bangladesh, Strategic Vision, Policy Framework**.**

Introduction:

Artificial Intelligence (AI) has emerged as one of the defining technological advancements of the 21st century, transforming industries and societies across the globe. From healthcare and education to governance and security, AI's influence is pervasive, and its potential to drive both innovation and economic growth is undeniable. For Bangladesh, a country striving to position itself as a leader in South Asia's digital economy, the responsible and strategic deployment of AI technologies has become a critical component of its long-term development goals. Recognizing this, the Government of Bangladesh introduced its first-ever national AI Strategy in 2020, outlining the country's vision to leverage AI for sustainable development, improved governance, and socioeconomic transformation.

While the 2020 National AI Strategy marked a significant step in acknowledging the role of AI in the nation's future, it was primarily a visionary document, setting ambitious goals but offering limited details on implementation mechanisms. Fast forward to 2024, Bangladesh has now introduced a draft National AI Policy 2024 that seeks to move beyond the initial strategy, providing a more structured framework for AI development and regulation. The draft policy aims to address the evolving challenges and opportunities presented by AI, including but not limited to ethical considerations, data privacy concerns, and the need for skilled human capital to ensure AI's responsible and effective use.

This article will examine the journey from the 2020 AI Strategy to the 2024 draft AI Policy. This analysis will highlight the policy shifts, evaluate the progress made, and critically assess the gaps that remain. As AI continues to evolve rapidly, so too must the legal and regulatory frameworks that govern it. Bangladesh's efforts to balance innovation with responsibility will be crucial in determining the success of its AI initiatives on both national and global stages.

By exploring these key developments, one can understand Bangladesh's approach to fostering an AI-powered future while navigating the complexities of AI governance.

National Strategy for Artificial Intelligence (AI) Bangladesh 2020: The First Step

The National AI Strategy 2020 represented Bangladesh's first major foray into the realm of artificial intelligence policymaking, reflecting the government's recognition of AI's transformative potential in the country's pursuit of technological and economic advancement. With the global AI race accelerating, Bangladesh aimed to position itself as a competitive player in the international AI landscape while addressing domestic challenges across various sectors through innovative AI solutions. The strategy, spearheaded by the Information and Communication Technology (ICT) Division, sought to harness AI technologies to drive national development, aligning with the government's broader vision of a "Smart Bangladesh".

1. Vision and Goals of the Strategy

At the heart of the National AI Strategy 2020 was a clear ambition: to establish Bangladesh as a hub for AI innovation and development by fostering the creation, adaptation, and application of AI technologies across all sectors of the economy. The strategy's central goal was to leverage AI to advance key sectors, including agriculture, education, healthcare, governance, and transportation. By doing so, the government aimed to boost productivity, enhance public service delivery, and ultimately, improve the quality of life for Bangladeshis.

The document articulated a multi-dimensional vision, that emphasized:

- **Innovation and economic growth**: Promoting the development of AI-based startups, encouraging research and innovation, and facilitating the growth of AI-driven businesses.

- **Human development**: Focusing on AI to improve access to education, health services, and skill development, especially in underserved areas.

- **AI for good governance**: Using AI to enhance public service delivery, automate administrative processes, and strengthen decision-making in governance.

- **AI-driven social development**: Addressing pressing social challenges such as poverty, environmental sustainability, and disaster management through AI applications.

2. Sectoral Focus Areas

The 2020 National AI Strategy was organized around several key sectors where AI could be most impactful, reflecting the government's focus on aligning AI innovation with its broader development goals:

- **Healthcare**: AI was identified as a critical tool to address the challenges of Bangladesh's overburdened healthcare system. The strategy envisioned the use of AI for diagnostics, predictive healthcare, telemedicine, and personalized treatment plans, especially in remote and rural areas. AI's ability to analyze large volumes of medical data was seen as a means to improve disease detection and treatment efficiency.

- **Agriculture**: Agriculture, being a cornerstone of Bangladesh's economy, was another major area of focus. AI applications were proposed for precision agriculture, improving crop yields, and mitigating risks posed by climate change and environmental degradation. AI-powered tools could help optimize resource use, predict weather patterns, and monitor crop health, empowering farmers with actionable insights.

- **Education**: AI was expected to revolutionize the education sector by

offering personalized learning experiences and addressing learning gaps. The strategy recognized the potential of AI to enhance online learning, automate administrative tasks, and support teachers through intelligent tutoring systems, especially given the increasing emphasis on digital education.

- **Governance**: The government acknowledged that AI could play a pivotal role in transforming public administration. By automating routine tasks, improving data-driven decision-making, and optimizing resource allocation, AI was seen as a tool for enhancing efficiency and transparency in governance. Potential applications included smart city management, tax collection, and public grievance redressal systems.

- **Disaster Management and Climate Change**: Given Bangladesh's vulnerability to natural disasters, AI was proposed as a means to improve disaster preparedness and response. The strategy advocated the use of AI for predictive analytics in disaster management, early warning systems, and real-time monitoring of natural hazards like floods and cyclones. Additionally, AI could help develop solutions for mitigating the impacts of climate change, such as reducing carbon emissions and managing natural resources.

3. Key Pillars of the AI Strategy

To realize its ambitious vision, the National Strategy for AI Bangladesh 2020 was built upon several key pillars:

- **AI Research and Development (R&D)**: Recognizing that innovation in AI would require a robust ecosystem for research and development, the strategy emphasized the need to establish AI

research institutes, collaborate with international research bodies, and incentivize academic and private sector R&D initiatives. The government aimed to create AI research hubs within universities and promote partnerships between academia, industry, and government agencies.

- Capacity Building and Skill Development: One of the major challenges identified in the strategy was the lack of skilled AI professionals in Bangladesh. To address this, the strategy proposed a comprehensive capacity-building agenda, including AI-specific training programs, curriculum development at the tertiary level, and the integration of AI concepts in school-level education. The strategy also emphasized the need for continuous professional development to equip workers with the necessary skills to thrive in an AI-driven economy.

- Data Infrastructure and Access: AI relies heavily on data, and the strategy highlighted the importance of developing robust data infrastructure and ensuring secure access to high-quality data. The government recognized the need for open data policies, improved data-sharing mechanisms, and enhanced data security to support AI applications. Ensuring data privacy and establishing guidelines for ethical data use were also deemed crucial for building public trust in AI technologies.

- AI Ethics and Regulation: Ethical considerations were central to the 2020 AI Strategy, with the government acknowledging the risks associated with AI, including job displacement, privacy concerns, and potential biases in AI systems. The strategy called for the development of ethical guidelines and regulatory frameworks to ensure that AI is used responsibly and in a way that

protects citizens' rights. This included setting up governance bodies to oversee AI deployment and addressing legal challenges associated with AI adoption.

- Public-Private Partnerships: The strategy emphasized the need for collaboration between the government, private sector, and international partners to accelerate AI adoption. By fostering an environment conducive to investment and innovation, the government sought to encourage private sector participation in AI development and deployment. This collaboration was seen as vital to driving innovation, developing AI infrastructure, and ensuring the sustainability of AI initiatives.

4. Challenges and Gaps

While the 2020 Strategy laid a strong foundation for AI development in Bangladesh, it was not without its limitations. The strategy's ambitious goals were not always matched with clear implementation plans, leaving questions about how the government would achieve its targets. Key challenges included:

- **Resource Constraints**: The strategy acknowledged the need for significant investments in AI infrastructure, R&D, and skill development, but it did not provide details on how these investments would be secured or allocated. Given Bangladesh's existing resource limitations, there were concerns about the feasibility of some of the proposed initiatives.

- **Regulatory Frameworks**: While the strategy recognized the importance of AI ethics and regulation, it did not provide a concrete roadmap for developing the necessary legal frameworks. This gap left room for uncertainty about how AI applications would be governed, especially in sensitive areas such as healthcare, law enforcement, and data privacy.

- **Skilled Workforce**: The lack of a skilled workforce in AI was identified as a critical challenge, but the strategy did not fully address the long-term plans for addressing this gap. While capacity-building initiatives were proposed, there were concerns about whether these efforts would be sufficient to meet the growing demand for AI talent.

National AI Policy 2024 (Draft): A Step Forward?

The release of Bangladesh's Draft AI Policy in 2024 marks a critical evolution in the country's AI governance, signaling a shift from the ambitious vision of the 2020 Strategy to a more structured, implementable framework. While the 2020 Strategy laid the foundation for AI adoption across multiple sectors, the 2024 draft policy brings a more practical focus on regulation, ethics, and capacity building, addressing several of the gaps that the earlier strategy left open. The 2024 policy represents a continuation of the national commitment to AI, but with significant refinements in areas such as governance, legal frameworks, and alignment with international standards. Below is a detailed analysis of The National AI Policy 2024 with regards to the major shifts it has done from the National Strategy for AI Bangladesh 2020:

1. From Vision to Implementation

Key Shift: Actionable Frameworks- One of the major shifts in the 2024 Draft Policy is the move from broad aspirations to concrete, actionable measures. The 2020 AI Strategy provided a wide-ranging vision, highlighting the transformative potential of AI in sectors like healthcare, education, and governance. However, it lacked detailed implementation plans, leaving questions about how these goals would be realized. The 2024 draft policy attempts to bridge this gap by introducing specific implementation timelines, measurable goals, and detailed roles for various stakeholders, including government agencies, private enterprises, and academic institutions.

Analysis: This shift from vision to implementation is a crucial evolution in Bangladesh's AI policy framework. While the earlier strategy set out ambitious targets, the lack of clear pathways for implementation made it difficult to evaluate progress. The 2024 policy's focus on concrete steps, such as establishing sector-specific AI task forces and allocating funding for AI R&D, reflects a more pragmatic approach to AI governance. It demonstrates that the government has learned from the experience of the past four years and recognizes the need for a structured roadmap to achieve its AI goals.

2. Regulatory and Legal Frameworks: Closing the Gaps

Key Shift: Focus on Regulation and Ethics– Another critical development in the 2024 draft policy is the stronger emphasis on regulatory frameworks, particularly regarding AI ethics, data privacy, and the responsible use of AI technologies. While the 2020 Strategy acknowledged the importance of ethics and regulation, it did not provide specific guidance on how these concerns would be addressed. The 2024 draft policy introduces a detailed framework for AI governance, including:

- The establishment of an AI Ethics Board to oversee AI applications and ensure adherence to ethical principles.

- A legal framework for data privacy and security, particularly in sectors like healthcare and finance where AI applications could impact sensitive personal data.

- Provisions for algorithmic transparency and accountability, ensuring that AI systems do not perpetuate bias or discrimination, and that citizens can seek redress for harms caused by AI-driven decisions.

Analysis: This focus on ethics and regulation represents a significant improvement over the 2020 Strategy, which was somewhat vague in its approach to these critical issues. AI ethics

and governance are now at the forefront of international AI discourse, with growing concerns about AI's impact on privacy, fairness, and accountability. The 2024 draft policy's emphasis on creating legal safeguards aligns Bangladesh with global best practices, such as the OECD AI Principles and the EU's AI Act, reflecting a maturity in Bangladesh's approach to AI governance.

However, the success of these regulatory frameworks will depend on how well they are implemented and enforced. While the 2024 policy introduces key regulatory bodies, the real test will be in their operational capacity. Bangladesh will need to invest in building a regulatory infrastructure that can effectively monitor and control AI technologies, as well as ensure public trust in AI-driven systems.

3. Data Governance and Infrastructure

Key Shift: Building Data Ecosystems– A crucial component of the 2024 draft policy is its focus on data governance and infrastructure, which was a relatively underdeveloped area in the 2020 strategy. The draft policy recognizes that AI's success relies heavily on access to large, high-quality datasets. It proposes:

- The creation of a National Data Policy to ensure the responsible collection, storage, and sharing of data across both public and private sectors.

- Establishing a national data-sharing platform to facilitate access to anonymized datasets for AI developers and researchers.

- Enhancing cybersecurity measures to protect data from breaches and misuse, particularly in sectors like finance and healthcare where sensitive data is processed.

Analysis: This enhanced focus on data governance marks a crucial shift in Bangladesh's AI policy. In the 2020 Strategy, the emphasis was on AI applications, but there was limited consideration of the infrastructure needed to support those applications. Without a

robust data ecosystem, AI technologies cannot function effectively. The 2024 draft policy's proposal to create a centralized data-sharing platform is particularly promising, as it could accelerate AI innovation by providing researchers and developers with access to valuable datasets.

However, as with regulatory frameworks, the challenge lies in implementation. Establishing a secure, transparent, and accessible data-sharing platform requires significant investment in both technology and human resources. Furthermore, the draft policy will need to ensure that data governance frameworks are aligned with global data privacy standards such as the General Data Protection Regulation (GDPR) to ensure trust in AI systems that handle personal data.

4. Focus on Human Capital Development

Key Continuation: Capacity Building-One area of continuity between the 2020 Strategy and the 2024 Draft Policy is the emphasis on capacity building and skill development. Both documents recognize the need to develop a workforce that is skilled in AI technologies to ensure that Bangladesh can harness the full potential of AI. The 2024 draft policy builds on this by proposing:

- The establishment of AI training centers across the country, particularly in universities and technical institutions.
- Integration of AI-related curricula at all levels of education, from primary schools to higher education institutions.
- Collaboration with international partners to provide AI scholarships and opportunities for Bangladeshi students to study AI abroad.

Analysis: The continuity in the focus on human capital development is a positive sign, as it demonstrates that the government understands the long-term nature of AI readiness. The inclusion of AI in educational curricula is particularly important for creating a pipeline of future AI talent. However, it is essential that the government not only focus on technical skills but also emphasize AI ethics, law, and policy training to ensure that future AI professionals are equipped to navigate the complex legal and ethical challenges that AI presents.

5. International Collaboration and Compliance

Key Shift: Alignment with International AI Standards-While the 2020 AI Strategy emphasized the importance of international collaboration, the 2024 draft policy takes this a step further by explicitly aligning Bangladesh's AI governance with international standards. This includes references to global initiatives such as the OECD AI Guidelines and the United Nations' initiatives on AI ethics. The draft policy also suggests creating bilateral partnerships with AI-leading nations to exchange knowledge, technologies, and best practices.

Analysis: This alignment with international standards is a crucial development, as it ensures that Bangladesh's AI policy is consistent with global norms and practices. By doing so, Bangladesh can position itself as a responsible player in the global AI ecosystem, which could attract foreign investment and partnerships. However, aligning with international standards also means that Bangladesh will need to be vigilant about AI-related human rights issues, particularly in areas like surveillance, freedom of expression, and data protection.

Suggestions for the Future: Enhancing AI Implementation and Ensuring Ethical Use

As Bangladesh continues its journey into the AI era, there is a need for a forward-thinking approach that balances innovation with responsibility. While the 2024 Draft AI Policy has laid a strong foundation, the future of AI in Bangladesh will depend on how well the country adapts to rapidly evolving technological landscapes and addresses the ethical, social, and legal challenges that AI presents. Below are key recommendations to ensure successful AI implementation and responsible usage:

1. Strengthen Institutional and Regulatory Capacity

One of the foundational elements of responsible AI governance is a robust regulatory framework. While the 2024 Draft Policy outlines regulatory bodies like the AI Ethics Board, their effectiveness will depend on their capacity to enforce ethical standards and legal compliance.

- **Expand Regulatory Frameworks**: Bangladesh should build a comprehensive regulatory infrastructure capable of overseeing AI deployment across all sectors. This involves not only establishing an AI Ethics Board but also empowering regulators with enforcement authority, sufficient funding, and technical expertise. A central AI regulatory body could be created to work in collaboration with sectoral agencies, ensuring consistent oversight.

- **Develop AI-Specific Legislation**: In addition to regulatory bodies, there is a need for AI-specific laws addressing issues like data privacy, algorithmic accountability, and liability for AI-caused harm. The legal framework should clearly define AI-related responsibilities for developers, users, and regulators. Bangladesh should look to international best practices, such as the EU's AI Act, as a model for creating enforceable AI laws that protect citizens' rights while fostering innovation.

2. Create Sector-Specific AI Guidelines

Given the diverse applications of AI across various industries, a one-size-fits-all approach to AI regulation will not suffice. Sector-specific guidelines are necessary to address the unique ethical, legal, and operational challenges posed by AI in different fields. Bangladesh should focus on developing tailored AI guidelines for key sectors where AI is expected to have significant impacts, such as:

- **Healthcare**: AI in healthcare holds great potential for improving diagnostics, personalized treatment, and resource management. However, it also raises serious ethical concerns related to patient privacy, consent, and algorithmic bias. Bangladesh should develop specific guidelines for AI in healthcare, ensuring that patient rights are protected and that AI systems are used to complement, rather than replace, human expertise. Ethical considerations, such as transparency in decision-making and the ability to explain AI-driven medical recommendations, should be prioritized.

- **Education**: The use of AI in education can help personalize learning, automate administrative tasks, and improve student outcomes. However, it also risks exacerbating educational inequalities if not properly regulated. Guidelines for AI in education should focus on ensuring equitable access to AI-driven tools, protecting student data, and avoiding biases in AI-powered learning platforms. A framework for monitoring and evaluating the impact of AI on student learning outcomes should be established.

- **Financial Services**: AI is increasingly being used in financial services for risk assessment, fraud detection, and automated decision-making. While these applications offer efficiency gains, they also raise concerns about transparency and discrimination in credit scoring, lending, and investment decisions. Bangladesh should develop sector-specific guidelines that require algorithmic transparency and fairness in AI-driven financial decisions, as well as mechanisms for consumers to challenge biased or erroneous AI decisions.

- **Agriculture**: AI can revolutionize agriculture by improving crop

monitoring, optimizing irrigation, and predicting market demand. However, smallholder farmers may struggle to access and understand AI-driven tools, leading to unequal benefits. Guidelines for AI in agriculture should focus on making AI tools accessible to small-scale farmers, ensuring that the benefits of AI are distributed equitably across the agricultural sector.

3. Foster Public-Private Collaboration

AI development and deployment cannot be achieved solely through government initiatives. The private sector, particularly technology companies, startups, and research institutions, will play a crucial role in driving AI innovation. Bangladesh needs to create an enabling environment for public-private partnerships (PPP) to ensure the efficient and responsible development of AI technologies.

- **Leverage Private Sector Expertise**: The private sector, especially tech companies, has the expertise and resources to drive AI innovation at scale. The government should collaborate with these companies to develop and implement AI solutions, particularly in priority sectors like healthcare, education, and agriculture. Public-private partnerships can accelerate the adoption of AI by pooling resources and expertise, enabling quicker development of AI applications that address national needs.

- **Incentivize Research and Development (R&D)**: To foster a thriving AI ecosystem, the government should incentivize private sector investment in AI research and development. Tax breaks, grants, and subsidies could be offered to companies that invest in AI innovation and workforce training. Collaborative R&D programs between universities, government bodies, and private enterprises should be encouraged to

drive cutting-edge AI research and the creation of local AI solutions.

- **Create Innovation Hubs**: Bangladesh should consider establishing AI innovation hubs where public institutions, private companies, and academic researchers can collaborate on developing AI technologies. These hubs would act as incubators for AI startups, provide resources for AI research, and facilitate knowledge-sharing among stakeholders. By creating a supportive environment for AI entrepreneurs, Bangladesh can accelerate the commercialization of AI technologies and ensure that innovation is aligned with national priorities.

4. Address the Skills Gap

AI development requires a highly skilled workforce, and Bangladesh currently faces a significant skills gap in AI-related fields. To ensure that the country can fully leverage AI technologies, the government must prioritize capacity building at all levels of education.

- **AI Education and Training**: AI-related curricula should be integrated into the educational system at all levels, from primary schools to universities. Specialized AI degree programs should be established in universities, while technical and vocational training institutions should offer AI-related courses for individuals seeking to enter the AI workforce. A national AI scholarship program could be created to support students pursuing AI studies, both domestically and internationally.

- **Upskilling the Existing Workforce**: In addition to training new AI professionals, there is a need to upskill the existing workforce to ensure they are prepared for an AI-driven future. The government, in collaboration with the private sector, should launch AI upskilling initiatives that provide AI training for workers across

industries, from healthcare professionals to factory workers. This will help prevent job displacement and ensure that AI technologies are used to augment, rather than replace, human labor.

- **Promote Women in AI**: Gender diversity in the AI workforce is critical to ensuring that AI systems are inclusive and do not perpetuate existing gender biases. Bangladesh should launch initiatives aimed at promoting women in AI, including scholarships, mentorship programs, and gender-sensitive policies that encourage women to pursue careers in AI and STEM fields.

5. Build Trust Through Transparency and Public Engagement

Public trust in AI is essential for its successful adoption. If the public perceives AI technologies as opaque, biased, or harmful, there may be significant resistance to AI deployment. To build public trust, Bangladesh must prioritize transparency and public engagement in AI development.

- **Promote Algorithmic Transparency**: The government should mandate that all AI systems used in public services and critical sectors, such as healthcare and education, are transparent and explainable. Citizens should have the right to understand how AI systems make decisions, especially when those decisions affect their rights or livelihoods. Mechanisms for auditing and verifying AI algorithms should be established to ensure that AI systems are free from bias and discrimination.

- **Public Consultation and Awareness Campaigns**: Public consultation should be an integral part of the AI policy development process. The government should actively seek feedback from citizens, civil society organizations, and industry stakeholders on AI policies and regulations. In addition, the government

should launch AI awareness campaigns to educate the public about the benefits and risks of AI, and how AI is being used in public services. This will help demystify AI technologies and ensure that citizens are informed participants in the AI governance process.

- **Ensure Data Protection and Privacy**: Data privacy is a significant concern for citizens, particularly as AI systems rely on large volumes of personal data. The government must ensure that robust data protection laws are in place and that AI developers adhere to strict privacy standards. Implementing data protection frameworks aligned with global standards, such as the GDPR, will be essential to protect citizens.

Conclusion

The transition from Bangladesh's National AI Strategy 2020 to the Draft AI Policy 2024 marks a significant maturation in the country's AI governance framework. While the 2020 Strategy was visionary, outlining broad ambitions across sectors like healthcare, agriculture, and governance, it lacked detailed pathways for implementation. The 2024 Draft Policy, by contrast, addresses these gaps, offering concrete measures to regulate AI, protect data privacy, and build capacity within the AI workforce. Importantly, it introduces key governance mechanisms such as an AI Ethics Board and a national data-sharing platform, reflecting Bangladesh's intent to adhere to global standards of responsible AI use, including alignment with the OECD AI Principles and the EU's AI Act.

However, the success of this policy will depend on effective enforcement and the continued development of the country's regulatory and institutional capacities. To ensure long-term benefits, Bangladesh must focus on building trust in AI technologies through transparency and public engagement, while simultaneously addressing sector-specific challenges. By fostering public-private partnerships, investing

in AI research and development, and addressing the digital skills gap, Bangladesh can position itself as a regional leader in AI innovation. The road ahead is challenging, but with the right regulatory frameworks and an inclusive approach to AI governance, Bangladesh can leverage AI for sustainable growth and socio-economic transformation.

References:

Primary Sources:

1. National Strategy for Artificial Intelligence of Bangladesh, 2020

2. National Artificial Intelligence Policy 2024 (Draft)

Secondary Sources:

1. Heath V, 'Women and the Fourth Industrial Revolution: An Examination of the UAE's National AI Strategy' in Elie Azar and Anthony N Haddad (eds), Artificial Intelligence in the Gulf: Challenges and Opportunities (Palgrave Macmillan 2021)

2. Hadfield GK and Clark J, 'Regulatory Markets: The Future of AI Governance' (2023) ArXiv:2304.04914

3. Aguiar-Díaz I, Ruiz-Mallorquí MV, González-López Valcarcel B, 'Nursing Homes: Affiliation to Large Chains, Quality and Public–Private Collaboration' (2022) 10 Healthcare 1-10

4. Sun Y, Hu Y, Zhang H, Chen H and Wang F-Y, 'A Parallel Emission Regulatory Framework for Intelligent Transportation Systems and Smart Cities' (2023) IEEE Transactions on Intelligent Vehicles 8

5. Aragão JPS and Fontana ME, 'Guidelines for Public Sector Managers on Assessing the Impact of Outsourcing on Business Continuity Strategies: A Brazilian Case' (2022) 16 Journal of Global Operations and Strategic Sourcing 118-141

6. Sebastian G, 'Privacy and Data Protection in ChatGPT and Other AI Chatbots: Strategies for Securing User Information' (2023) 15(1) International Journal of Security and Privacy in Pervasive Computing 1

7. Yong BP-P and Ling Y-L, 'Skills Gap: The Importance of Soft Skills in Graduate Employability as Perceived by Employers and Graduates' (2023) 8(1) Online Journal for TVET Practitioners 25

8. Zou A and others, 'Representation Engineering: A Top-Down Approach to AI Transparency' (ArXiv, 2023) https://arxiv.org/abs/2310.01405 accessed 18 October 2024