

AI Data Management Strategies in Tehran: A Gap Analysis Approach




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E d i t o r	R e v i e w e r s
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1. Round 1

1.1 Reviewer 1

Reviewer:

In the opening paragraph (“The emergence of artificial intelligence (AI) as a transformative force...”), the discussion blends technological, socio-political, and ethical dimensions. Consider structuring this paragraph more clearly (e.g., first technological, then governance, then ethical implications) for smoother flow.

In Table 1 (“Current Status of Selected Factors for Data Management Systems”), the “Sources” column only cites a narrow set of references (Hashem et al., Khan et al., Li et al., Lim). Consider updating with more recent and diverse references for robustness.

Table 2 (“Global Smart City Strategies”) is rich in comparative data, but the discussion following it is largely descriptive. More analytical commentary on why Tehran scores poorly in certain areas (e.g., governance, economy) would be valuable.

The text refers to “Figure 1 Evaluation of Tehran’s Status Compared to Other Global Cities” but does not provide detailed interpretation. A fuller narrative explaining key insights from the figure is needed.

While comparing Tehran to Copenhagen and Tokyo, the paper suggests “Tehran’s lack of equivalent infrastructure not only hinders progress...”. Please also acknowledge contextual differences such as sanctions, demographics, and urban density to avoid overgeneralization.

Author revised the manuscript and uploaded the updated document.

1.2 Reviewer 2

Reviewer:

The paper states, “AI’s role in shaping anticipatory governance models...”. However, the cited literature (Xu et al., 2024; Cugurullo, 2024) is largely conceptual. Including more empirical studies would strengthen the foundation of this argument.

When writing, “Algorithmic governance, or the reliance on algorithms to structure decision-making processes...”, it would help to clearly distinguish “algorithmic governance” from “algocracy” for readers unfamiliar with these terms.

The paragraph beginning “Technological innovations underpinning AI in cities range from machine learning algorithms to digital twin models” repeats points already made earlier about predictive modeling and digital twins. Streamlining here would improve conciseness.

The subsection “Privacy concerns” states the need for regulations but does not mention Iran’s current data protection laws. Please situate this recommendation within the existing legal framework.

The recommendation “Establish an urban data marketplace” is innovative, but the feasibility in Tehran’s regulatory and economic environment is unclear. Please address potential institutional and political barriers.

The line “Tehran’s reliance on fragmented strategies...has contributed to persistent gaps” is strong. Linking this more explicitly to the concept of “AI solutionism” (as cited from Cugurullo et al., 2023) would strengthen theoretical alignment.

Author revised the manuscript and uploaded the updated document.

2. Revised

Editor’s decision after revisions: Accepted.

Editor in Chief’s decision: Accepted.