## **OPEN PEER REVIEW**

# Strengthening Data Privacy Laws in the Age of IoT

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### 1. Round 1

#### 1.1. Reviewer 1

Reviewer:

The references are somewhat outdated, with critical literature missing on recent advancements in IoT security measures post-2020. Recommend including updated sources to reflect current challenges and technological advancements in IoT data privacy.

The paper discusses theoretical legal frameworks but lacks empirical evidence or case studies to support the proposed changes. Include case studies or data analysis that demonstrate the effectiveness of these proposed legal changes in practical scenarios.

The manuscript uses a broad definition of IoT, which might confuse the specificity required for legal discussions. Provide a more precise definition of IoT devices covered under the proposed laws, perhaps by categorizing the devices based on their usage like healthcare, home automation, etc.

The discussion on enhanced security protocols is vague. Specify which security standards or protocols could be enforced, referencing successful implementations in other regulatory contexts.

Authors revised the manuscript and uploaded the document.

1.2. Reviewer 2

Reviewer:

The paper calls for comprehensive legislation but does not provide a detailed framework or specific aspects that such legislation should cover. It would be beneficial to outline specific legal provisions that address data collection, consent, retention, and the right to be forgotten.

There is no mention of how the proposed legal changes will be monitored for effectiveness. Suggest incorporating a framework for regular impact assessments to evaluate the effectiveness of the new laws in protecting privacy.

The manuscript could benefit from a discussion on stakeholder engagement strategies. Recommend strategies to involve various stakeholders, including technology developers, policymakers, and privacy advocates, in the legislative process.

Ensure the proposed legal frameworks are technologically neutral to avoid favoring specific technologies or platforms, which could hinder innovation.

The paper should emphasize data minimization principles more strongly, detailing how these principles can be incorporated into IoT device functionalities to enhance privacy.

Detail the enforcement mechanisms that will ensure compliance with the new data privacy laws. This could include penalties for non-compliance and measures to empower regulatory bodies.

Finally, propose a structured review and revision process for the laws to ensure they remain relevant as technology evolves. This process should include periodic reviews, stakeholder feedback, and adaptation strategies based on technological advancements.

Authors revised the manuscript and uploaded the document.

### 2. Revised

Editor's decision: Accepted. Editor in Chief's decision: Accepted.

