

Review of: "A Proposed Secure Wearable Device Payment System Based on Blockchain Technology"

Mudita Uppal¹

¹ Chitkara University, Chandigarh, India

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The article provides a novel approach by integrating blockchain technology with wearable payment systems. While it presents a promising framework, some areas could be improved to enhance the paper's overall impact and clarity. The use of blockchain to secure wearable payments is timely and aligns with emerging trends in financial technology. The paper gives a comprehensive background on IoT, wearable devices, and blockchain, providing context for the proposed solution. The proposed architecture is clearly presented, with layered designs and the integration of blockchain at multiple levels.

Suggestions for Improvement:

- Include a prototype or simulation to validate the proposed system. This would strengthen the claims of enhanced security and scalability.
- Provide more detailed explanations of blockchain implementation specifics, such as:
 - Which consensus mechanism (e.g., PoW, PoS) will be used?
 - How data integrity is maintained across nodes.
- Include a comparative analysis of the proposed system against existing wearable payment systems to highlight its advantages and unique features.
- Discuss potential barriers to user adoption, including:
 - Usability concerns.
 - The system's compatibility with existing banking infrastructure.
- Address how the proposed system scales with increasing device numbers and what performance metrics (e.g., transaction speed) are anticipated.

Few Questions:

- How does the system prevent common blockchain vulnerabilities like 51% attacks or double-spending?
- What safeguards are in place to secure private keys stored on wearable devices?
- How does the system balance user privacy with the transparency of blockchain transactions?

- Can sensitive financial data be anonymized while maintaining traceability?
- How feasible is the integration of this blockchain-based solution with current banking systems?
- Are there any regulatory challenges that could arise from implementing this system in financial institutions?
- How does the use of blockchain affect the cost per transaction compared to traditional systems?
- What are the expected impacts on wearable device battery life and computational power?
- Could the framework be adapted for other IoT devices beyond wearables?
- How would the system handle real-time transactions in high-frequency scenarios, such as retail?

While the paper addresses an important issue and proposes an innovative solution, it currently lacks empirical validation and technical depth. Addressing these gaps would improve the paper's credibility and practical applicability.