ABSTRACT

The development of an e-voting application represents a significant step in modernizing

the general election process. This research aims to design and implement a secure, transparent,

and efficient electronic voting system. This application is expected to increase voter

participation and reduce welfare risks during elections.

This study includes technical, economic, legal, environmental, and social analyses related

to the implementation of e-voting. Technical aspects include application design, data security,

system scalability, and the integrity of the election process. The economic analysis considers

development and operational costs, as well as potential cost-efficiencies compared to

traditional election methods.

From a legal perspective, this study emphasizes the importance of regulatory compliance

to protect voter privacy and rights. Furthermore, the environmental aspect addresses the impact

of energy consumption and e-waste management, while the social aspect highlights the

importance of inclusion and accessibility of technology for all.

This application uses blockchain technology to ensure the security and integrity of votes,

as well as other features designed to increase public trust in the digital election process. The

results of this research are expected to serve as a reference for developers and stakeholders in

developing effective and reliable e-voting solutions.

Keywords: *Blockchain, E-voting, Smart Contract, Democracy*

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