

**THE ROLE OF E-VOTING IN PROMOTING PARTICIPATION AND
TRANSPARENCY IN ELECTIONS: A CASE STUDY OF THE JEMBRANA VILLAGE
HEAD ELECTION****Zahwa Nabila Putri Maharani**

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LM812@ums.ac.id**ABSTRACT**

This study explores the role of electronic voting (e-voting) in strengthening voter participation and ensuring transparency in elections, with a specific focus on its implementation in the Village Head Election (Pilkades) in Jembrana Regency, Bali. The research adopts a normative juridical method with a statute approach. It offers a novel perspective by providing an empirical evaluation of the effectiveness of e-voting at the village election level, highlighting its potential applicability to broader electoral contexts. The findings reveal that the implementation of e-voting in Jembrana has successfully increased voter turnout and ensured a more transparent and accountable election process. In conclusion, e-voting serves as an effective solution to address the challenges of traditional voting systems and can be replicated in other regions to strengthen local democracy, with potential for future integration into larger-scale elections.

Keywords: e-voting, voter participation, transparency, village election, Jembrana

INTRODUCTION

Elections are the cornerstone of a democratic system, allowing citizens to actively participate in selecting leaders and determining the direction of national policy. With technological advancements, various innovations have been introduced to improve the efficiency, transparency, and voter participation in the electoral process. One such innovation is electronic voting (e-voting), an electronic-based voting system designed to reduce the potential for fraud and enhance the accuracy of vote counting (Nailina Paramita Najati, et al., 2021).

The term e-voting emerged alongside technological progress aimed at simplifying the voting process. E-voting refers to the use of electronic devices in the process of casting and counting votes (Mahyudin, et al., 2020). The implementation of e-voting is expected to

accelerate vote counting efficiently, minimize human error, and optimize the use of time and resources (Junindri, M. T., et al., 2024). According to Sudikno Mertokusumo, the legal system is normative in nature, as it regulates matters of what ought to be, forming a cohesive structure of interrelated components (Zainal Arifin Mochtar, 2024:311). Therefore, the implementation of e-voting requires a clear and well-defined system as a normative framework for conducting electronic voting.

In addition, e-voting is believed to enhance voter participation and ensure electoral transparency through technologies that safeguard the integrity of the voting process. To ensure its effectiveness, the e-voting system must fulfill several cumulative principles, including being direct, general, free, confidential, honest, and fair, as mandated in Article 3 of Law Number 7 of 2023 on General Elections (Reza Yuna Dwi Rahmawati, et al., 2022). This article emphasizes that elections must be conducted based on the principles of directness, generality, freedom, confidentiality, honesty, and fairness. These principles are intended to guarantee that every citizen exercises their voting rights directly without representation, includes all eligible voters, allows free choice without coercion, maintains ballot secrecy, and ensures that the entire electoral process is conducted with integrity and fairness.

In Indonesia, the use of e-voting has been piloted in various contexts, including in the Village Head Election (Pilkades) in Jembrana Regency, Bali. Jembrana has been a pioneer in implementing e-voting at the village level since 2010. The village of Mendoyo Daging Tukad in Jembrana held a Pilkades using an e-voting system equipped with voter verification through electronic ID cards (e-KTP). The main objective of implementing e-voting was to enhance efficiency, transparency, and accuracy in the village head election process (Beni Willia Saputra, et al., 2021). The success of e-voting implementation in Jembrana has attracted attention and has become a pilot project for possible broader applications of e-voting in elections across Indonesia (Prasetyo, A., et al., 2023).

The implementation of e-voting in Jembrana has demonstrated several advantages, such as improved efficiency and speed in vote counting, and reduced human error. However, it also faces challenges, including the readiness of technological infrastructure, the digital

literacy of the community, and the presence of a supportive legal and regulatory framework. Therefore, a comprehensive evaluation of the e-voting implementation in Jembrana is crucial as a reference for potential nationwide adoption. Beyond technical and operational factors, the implementation of e-voting also requires a clear legal foundation and adequate regulation. This is essential to govern the e-voting process and protect the security and integrity of the election. The digital transformation of electoral processes must be supported by regulations that ensure fairness, transparency, and accountability throughout the entire voting process.

METHODS/IDEAS

This study employs a normative juridical method with a statute approach. The data sources consist of primary, secondary, and tertiary legal materials. Primary legal materials include various laws and regulations such as Law Number 7 of 2023 on General Elections, Law Number 11 of 2008 on Electronic Information and Transactions (ITE Law), Government Regulation in Lieu of Law (Perppu) Number 1 of 2014 concerning the Election of Governors, Regents, and Mayors, Ministry of Home Affairs Regulation Number 72 of 2020 on Village Head Elections, and Constitutional Court Decision Number 147/PUU-VII/2009. Secondary legal materials comprise legal literature, papers, and journals relevant to the topic of study. Tertiary legal materials include legal dictionaries and legal encyclopedias.

RESULTS AND DISCUSSION

Implementation of E-Voting in the Jembrana Village Head Election

The Village Head Election (*Pilkades*) is a form of grassroots democracy that plays a vital role in determining policies and the development direction at the village level. Jembrana Regency, Bali, has been a pioneer in implementing e-voting in *Pilkades*, particularly in the village of Mendoyo Dangin Tukad. The application of e-voting in the

Pilkades of Jembrana represents a progressive step in the modernization of local democratic processes. Since its initial implementation, the system has been designed to improve voting efficiency and accuracy, reduce the potential for fraud, and accelerate the vote-counting process.

Jembrana Regency began using e-voting for hamlet head elections in 54 hamlets across 31 villages in mid-2010. This success prompted local governments to adopt similar technologies in *Pilkades*, such as in Boyolali Regency (Central Java), Banyuasin Regency (South Sumatra), and Ambon City (Maluku). As of March 2024, approximately 1,700 villages in 28 regencies and 15 provinces in Indonesia have conducted e-voting-based *Pilkades* (Fifiana Wisnaen, et al., 2023).

The e-voting system used was designed to facilitate voters in casting their votes electronically, replacing the traditional paper-based method (Fanila Kasmita Kusuma, 2024). This process involves electronic identity verification, candidate selection through a touchscreen interface, and automatic vote counting with real-time accessibility. This implementation not only speeds up the election process but also reduces the potential for fraud and human error in vote tallying. Collaboration between the local government and the Agency for the Assessment and Application of Technology (BPPT) has resulted in an e-voting system tailored to the needs and characteristics of the local community (Idenanda, N., et al., 2022).

The adoption of e-voting in Jembrana has not only introduced technical changes but has also influenced community participation in the electoral process. The convenience and speed provided by the electronic system have contributed to increased voter participation, particularly among the younger generation more familiar with technology. Furthermore, e-voting strengthens transparency and accountability in the election process by enabling more efficient monitoring and auditing. Nevertheless, challenges such as the need for adequate technological infrastructure and public education on system use remain crucial issues to address.

Jembrana Regency has become a pioneer in the implementation of e-voting in Indonesia. This initiative aligns with the spirit of Constitutional Court Decision No.

147/PUU-VII/2009, which grants regions the flexibility to adopt technology in elections, provided that democratic principles and infrastructure readiness are met. In the case of *Pilkades* in Jembrana, the local government ensured that e-voting adhered not only to the principles of direct, general, free, confidential, honest, and fair elections (commonly known as *Luber Jurdil*), but was also supported by adequate technological infrastructure and well-trained human resources.

The Impact of E-Voting on Voter Participation and Electoral Transparency

The use of e-voting in Indonesia's elections has significantly influenced voter turnout. This technology simplifies the voting process, reduces time requirements, and minimizes human errors (Junaidi, M., et al., 2020). Additionally, e-voting helps address issues such as duplicate ID cards, inaccurate voter lists, and damaged or invalid ballots. Thus, e-voting contributes to the improved efficiency and effectiveness of the election process, which in turn encourages broader public participation.

From a legal perspective, the basis for e-voting implementation in Indonesia includes Law Number 11 of 2008 on Electronic Information and Transactions (ITE Law), specifically Article 5, which recognizes electronic information and documents as valid legal evidence. Additionally, Government Regulation in Lieu of Law Number 1 of 2014 on the Election of Governors, Regents, and Mayors, Article 85, permits voting using electronic equipment. Constitutional Court Decision Number 147/PUU-VII/2009 permits the use of e-voting in elections, provided it does not violate the principles of direct, general, free, confidential, honest, and fair elections and is supported by adequate technology and human resources (Andri Setiawan, 2023). These legal frameworks collectively support the implementation of e-voting as a modernization effort within Indonesia's electoral system.

The application of e-voting in general elections in Indonesia also holds great potential to enhance transparency and efficiency in the democratic process. By utilizing digital technology, e-voting can reduce fraud, accelerate vote counting, and provide broader access for voters (Dian Fitri Nugrahayu, et al., 2024). E-voting systems are designed with high-security and transparency standards through data encryption, which protects vote integrity

and enables real-time monitoring and auditing. This minimizes the possibility of vote manipulation and ensures accurate vote tabulation. Furthermore, e-voting can reduce unlawful interventions such as vote inflation and result manipulation through a transparent and automated digital system (Cahyaningrum, et al., 2020).

CONCLUSION

The implementation of e-voting in the Village Head Election (*Pilkades*) in Jembrana Regency, Bali, has proven effective in enhancing efficiency, participation, and transparency in the electoral process. The adoption of e-voting in Jembrana successfully reduced election-related costs, particularly by saving on ballot printing expenses. Moreover, the mobile-based e-voting system provided better access for voters, including those with limited mobility or who live far from polling stations. This success demonstrates that e-voting can be an effective solution for addressing challenges in traditional elections and for strengthening democracy at the local level.

RECOMMENDATIONS

To broaden the benefits of e-voting, it is recommended that other local governments consider adopting similar systems for village head or other local elections. Prior to implementation, it is essential to ensure technological infrastructure readiness, trained human resources, and community outreach to improve public understanding and trust in the e-voting system. Additionally, a clear and comprehensive legal framework should be established to govern e-voting implementation, guaranteeing the security, confidentiality, and integrity of the election process. Collaboration between the central and local governments, as well as relevant stakeholders, is vital to ensure the successful and sustainable implementation of e-voting in Indonesia.

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