

Local Election Integrity in the Digital Era and the Role of Witnesses Election Participants in Regional and Legislative Elections

Saipul^{1*}, Yunizir², Merita Auli³, Khairunnisa⁴

^{1,2,3,4} Universitas Baturaja, Indonesia

* Correspondence e-mail: saipul.skb99@gmail.com 

Article history

Submitted: 2026/06/01; Revised: 2026/07/01; Accepted: 2026/07/31

Abstract

General elections are the primary instrument for realizing popular sovereignty and constitutional democracy in Indonesia. Elections, both regional head elections (Pilkada) and legislative elections (Pileg), require integrity assurance to ensure that the election results truly reflect the will of the people. This study aims to analyze the role of digital literacy and reporting-based election participant witnesses in maintaining the integrity of the results of the regional head elections (Pilkada) and legislative elections (Pileg) at the local level, as well as to examine the effectiveness of digital technology integration in increasing election transparency and accountability. The results show that 82% of respondents believe digital technology improves the effectiveness of election supervision, 79% stated that the digital reporting system increases the transparency of election results, and 74% believe that digital documentation can reduce the potential for data manipulation at the polling station (TPS) level. The level of digital literacy of witnesses is in the moderate to high category, with 41% of respondents having high digital skills. The use of digital technology also speeds up the process of reporting violations by up to 45% compared to manual methods. However, the implementation of digital-based election supervision still faces various challenges, including the spread of political disinformation and hoaxes found by 63% of respondents, limited digital information verification capabilities (58%), and internet infrastructure constraints in several rural areas (29%).

Keywords

Election Integrity, Election Participant Witnesses, Legislative Elections, Regional Elections



© 2026 by the authors. This is an open access publication under the terms and conditions of the Creative Commons Attribution 4.0 International (CC BY SA) license, <https://creativecommons.org/licenses/by-sa/4.0/>.

INTRODUCTION

Election general is instrument main in realize sovereignty people and democracy in Indonesia. Implementation Elections, okay Election Regional Head (Pilkada) and Election Legislative (Pileg), must uphold tall principle integrity that includes honesty, fairness, transparency, and accountability for results election truly reflect will people. Integrity elections very important for guard trust public towards

the democratic process and legitimacy elected government. According to Imawan (2022), effective supervision can prevent various form violation elections, while Sulistiyo et al. (2025) confirm that justice And certainty law is aspect important in organization democratic elections. In addition that, integrity elections very contribute to quality order manage more government Good.

Integrity elections related close with trust public to system political and government. Elections with integrity will produce strong legitimacy for leader elected, while colored elections violation can lower trust public and trigger conflict social. Low integrity elections become Wrong One reason weakening democracy. On level local, challenges integrity elections the more complex Because existence proximity connection social and politics that can trigger conflict interest. Election local prone to to practice political transactional and elite intervention. Besides that, Rahmatunnisa (2024) confirm that effective supervision very required For guard integrity 2024 Election , Integrity And accountability political play a role important in increase trust public to results elections And institution politics . By Because that , the effort guard integrity elections become factor important in realize quality democracy And trusted (Fatimah et al., 2025).

Development digital technology also bring implications new to integrity elections. Digitalization system elections, such as use technology information in recapitulation voice and distribution information elections, in one side increase efficiency and transparency. But on the other hand other, technology Also present risk new in the form of digital data manipulation, attacks cyber, as well as distribution disinformation and hoax politics that can influence perception voters. By Because that, integrity elections in the digital era demand strengthening system security information as well as improvement digital literacy throughout actor elections, including organizers, supervisors, and witness participant elections. Development digital technology has bring change significant in order manage elections in Indonesia. Utilization system information elections, recapitulation voice digital- based, as well as use of social media in campaign political give opportunity for increase efficiency and transparency. However, on the other hand others, digitalization Also present challenge new in the form of potential data manipulation, disinformation, hoaxes politics, as well as attack cyber that can threaten integrity results elections. Condition This make supervision elections No Again only nature conventional, but also must adaptive to dynamics digital technology.

In the digital era, the role of witness participant elections experience expansion function. Witness sued own digital literacy, ability understand system

information elections, as well as skills in documenting and report findings in a way fast And accurate. Reporting digital- based, such as use application monitoring and sending result data calculation sound, to be instrument important in guard transparency and accountability elections. With Thus, the quality and capacity witness very influential to awake integrity elections local. Election local like Regional Election and Legislative Election own greater vulnerability tall to practice political money, pressure political local, as well as conflict interest elite area. By Because that, strengthening role witness participant elections at the level local become crucial in prevent violation And guard legitimacy results elections (Qurratu, 2024) . Integrity elections local no only impact on quality democracy area, but also on stability political and trust public to system democracy in a way national. Based on background behind above , there is a number of things to do reviewed in a way deep that becomes formulation problem in study This is 1) How role witness participant elections based literacy And digital reporting in guard integrity results Regional Election And Legislative elections at the level local , in the middle increasing risk disinformation , data manipulation , and attack cyber ? and 2) As far as where integration digital technology in system supervision elections local capable increase transparency and accountability elections through strengthening capacity witness participant elections , as well as What just challenge implementation that appears at the level area?

METHODS

Study implemented in the Regency Ogan Komering Ulu, is areas that have been organize Election Regional Head (Pilkada) and Election Legislative (Pileg) in Regency Ogan Komering Ulu. Research This done for 1 year with use method qualitative and quantitative. In data collection, which is used are primary data and secondary data. Primary data was obtained with conducting a structured survey to witness participant elections on regional elections and legislative elections at level local, do interview in- depth discussion group focused (FGD) and studies documentation. Secondary data obtained from Commission Election General (KPU), Bawaslu And agency or party related other.

Method analysis data using approach mixed methods (method mixture) with design sequential explanatory, continued quantitative data analysis with deepening qualitative approach This chosen For get comprehensive understanding about role witness participant elections based literacy And digital reporting in guard integrity results Regional Election And Legislative elections at the level local , at the same time identify challenge implementative integration digital technology in supervision

elections area. In a way conceptual, research This combine two approach main that is Approach Institutional Digital, and Approach Supervision Participatory Based Technology. Stages implementation study depicted in the flowchart study can seen on figure 1.

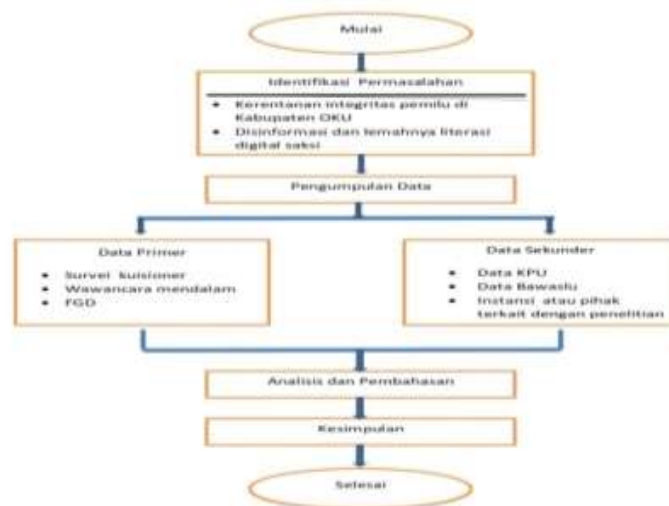


Figure 1. Stages Study

FINDINGS AND DISCUSSION

Result

This study, which examines *the integrity of local elections in the digital era and the role of election witnesses in the regional and legislative elections* in Ogan Komering Ulu Regency, involved 120 election witness respondents from several sub-districts. The study also involved election organizers, election supervisors, and political party teams through in-depth interviews and focus group discussions (FGDs). Usage survey results digital technology in supervision elections can seen on figure 1.



Figure 2. Usage Digital Technology in Supervision Elections

Survey results, 82% of respondents stated that the use of digital technology helped improve the effectiveness of election oversight at the polling station (TPS) level. Seventy-six percent of respondents reported actively using smartphones and digital communication apps like WhatsApp and Telegram to report vote count results. Meanwhile, 68% of respondents reported using digital documentation in the form of photos or videos as evidence in election oversight reports.

The research also showed that the digital literacy levels of election participants were moderate to high. Forty-one percent of respondents had high digital literacy, 37% moderate, and 22% low. Respondents in the high literacy category were generally of productive age and had experience participating in technology-based election monitoring training.

Regarding election transparency, 79% of respondents believed that the use of a digital reporting system could improve the transparency of vote count results compared to manual methods. Furthermore, 74% of respondents stated that digital documentation of vote count results helped reduce the potential for data manipulation at the polling station (TPS) level.

The survey also found that 63% of respondents had encountered the spread of political hoaxes or disinformation during the regional and legislative elections. The most common forms of disinformation included false quick count results, issues of identity politics, and manipulation of information related to the vote counting process. Fifty-eight percent of respondents reported difficulties verifying information due to limited digital literacy skills and access to official sources.

In terms of technological infrastructure, 71% of respondents stated that internet access in the research area was sufficient to support the implementation of digital surveillance, while 29% stated that there were still internet network constraints, especially in rural and remote areas.

Based on in-depth interviews with election organizers and supervisors, it was discovered that the integration of digital technology has accelerated the process of reporting election violations by an average of 45% compared to previous manual methods. Furthermore, the use of digital documentation is considered to help strengthen the validity of evidence in resolving election result disputes.

Discussion

The Role of Digital-Based Election Participant Witnesses in Maintaining Election Integrity

The research results show that election participant witnesses have a significant contribution to maintaining the integrity of local elections (Pilkada and Pileg).

Quantitative data shows that 82% of respondents believe digital technology helps improve the effectiveness of election supervision. This finding demonstrates that digital transformation has shifted election supervision patterns from conventional systems to faster, more open, and more documented systems. Election digitalization can increase transparency and strengthen accountability for election supervision through the use of information technology and electronic reporting systems. (Kurniawan et al., 2024) .

Witnesses' ability to use digital technology is a crucial factor in supporting election transparency. Sixty-eight percent of respondents used digital documentation as evidence of oversight. Documentation in the form of photographs of vote counting forms and videos of the recapitulation process are crucial tools in minimizing the potential for data manipulation. This aligns with study Aldi Afrihadi, Feni Rosalia, Syarief Makhya (2025) stated that digital documentation and application-based reporting can strengthen the validity of election supervision evidence and reduce the potential for electoral fraud.

integrity is greatly influenced by the capacity of election actors to maintain information transparency and accountability for digital democracy. In the context of local elections, witnesses are no longer merely administrative complements but have evolved into strategic actors in technology-based oversight. This finding is reinforced by research conducted by Adiwilaga & Pratama (2025) explained that digital-based participatory supervision of local elections in Indonesia is an important instrument in reducing the practice of political manipulation and conflicts of interest among local elites.

The research results show that a digital literacy gap persists. As many as 22% of respondents fell into the low digital literacy category. This situation demonstrates that strengthening the technological capacity of election participants remains a critical need, especially in facing the increasingly complex challenges of digital elections. Digital literacy skills are a key factor in increasing the public's capacity to face the challenges of disinformation and information manipulation in the digital space.

The Influence of Digital Technology on Election Transparency and Accountability

The use of digital technology has been proven to have a positive impact on increasing transparency and accountability in local elections. Seventy-nine percent of respondents stated that the digital reporting system made the oversight process more transparent and easier to monitor. This is consistent with research conducted by the Muhammad Imam Subkhia (2019) stated that digital transformation in public

governance can increase public trust through a more transparent and easily accessible information system. The 45% acceleration in reporting violations demonstrates that digital technology can improve the efficiency of election oversight. *The real-time reporting system* allows for immediate follow-up on suspected violations by election supervisors and political party teams. The digital political communication system allows for faster distribution of political information, thus supporting the effectiveness of election oversight. (Muhtadi, 2019)

The use of digital media also strengthens participatory oversight patterns between witnesses, the public, and election organizers. Witnesses can send information about vote count results directly through digital communication applications, thereby minimizing the potential for manipulation of the recapitulation results. This finding aligns with research (Mahpudin, 2021). which explains that digital media strengthens public participation and public oversight of political and democratic processes.

The research results show that digitalizing election monitoring also presents new challenges. As many as 63% of respondents encountered the spread of political hoaxes during the election process. Disinformation circulating on social media has the potential to influence public perception of election results and undermine public trust in local democracy. Social media has become a primary platform for the spread of political polarization and disinformation, which can threaten the quality of modern democracy. (Haidarrani & Rodiyah, 2026).

Challenges of Implementing Digital-Based Election Supervision

Research has found that the implementation of digital oversight at the regional level still faces several major obstacles, including limited digital literacy, uneven internet infrastructure, and minimal technical training for election witnesses. Disparities in internet access and technological infrastructure remain key challenges to implementing digital systems in developing countries. As many as 29% of respondents stated that internet access remains a major barrier to digital reporting. This is particularly true in rural areas where communication networks are limited. As a result, the delivery of documentation and monitoring reports is often delayed. Limited digital infrastructure in rural areas can hamper the effectiveness of digital transformation in public services and governance. (Dompak et al., 2026)

Respondent difficulties in verify digital information is by 58% . This indicates that media literacy and information literacy skills still need to be strengthened to address the rise of political hoaxes and information manipulation during the election stages. Improving media literacy is a crucial strategy in building community resilience

against the spread of false information in the digital era. (Hasanuddin et al., 2025)

The FGD results also revealed that there is no uniform operational standard for digital reporting mechanisms between political parties and election monitoring bodies. This situation has led to differences in the quality of documentation and reporting provided by election participant witnesses. Standardization of digital monitoring systems is essential to improve the effectiveness and integrity of technology-based election monitoring.

Implications for Strengthening Local Democracy

Strengthening the digital capacity of election participants has important implications for the quality of local democracy. Witnesses with strong digital skills have been shown to be more capable of conducting supervision quickly, accurately, and transparently. From a digital democracy perspective, the involvement of technology-based election actors is crucial for strengthening the legitimacy of election results and increasing public participation. The development of a networked society *encourages* the creation of a more participatory, information-technology-based democracy. (Haidarrani & Rodiyah, 2026) .

Research data shows that the use of digital technology not only increases the effectiveness of oversight but also strengthens the legitimacy of election results. When the oversight process is conducted transparently and well-documented, public trust in the results of regional and legislative elections increases. Digital-based election integrity is a crucial foundation for strengthening political legitimacy and the quality of democracy at the local and national levels.

CONCLUSION

Based on the research findings on Local Election Integrity in the Digital Era and the Role of Election Witnesses in the Regional and Legislative Elections in Ogan Komering Ulu Regency, it can be concluded that the development of digital technology has significantly influenced local election oversight mechanisms. The use of information technology, digital reporting applications, social media, and electronic documentation can increase the effectiveness, transparency, and accountability of the regional and legislative election oversight process.

The role of election participants' witnesses has undergone a transformation from conventional to digital-based supervision. Witnesses not only serve to directly supervise the voting and vote counting process, but also play a role in documenting the vote count results, reporting suspected violations in real time, and clarifying information circulating in the digital space. The study found that 82% of respondents

believed digital technology helped improve the effectiveness of election supervision, while 79% stated that digital reporting systems could improve the transparency of election results.

REFERENCES

- Adiwilaga, R., & Pratama, P. S. (2025). *Strategi Bawaslu Dalam Penanganan Pelanggaran Administrasi Pemilihan Umum Di Kecamatan Majalaya Kabupaten Bandung Tahun 2024 Dewan Perwakilan Daerah Provinsi serta Pemilihan Dewan Perwakilan Rakyat Daerah*. 3, 32–51.
- Aldi Afrihadi, Feni Rosalia, Syarief Makhya, M. M. (2025). *Menjaga integritas demokrasi lokal terhadap persoalan netralitas asn dalam pemilu dan pilkada 1,2,3,4*. 8(1), 311–321.
- Dompak, T., Firiansyah, I., & Ahdarrijal, Y. (2026). *Transformasi Pemilu Indonesia Menuju Digital Democracy : Suatu Kajian Literatur*. 8, 229–246.
- Fatimah, S., Alfarisi, M. A., Islam, U., Sunan, N., & Yogyakarta, K. (2025). *Teknologi dan Inovasi Dalam Pemilu Digital di indonesia*. 6(3).
- Haidarrani, A., & Rodiyah, R. (2026). *Digitalisasi Pemilu dan Disinformasi : Implikasinya terhadap Kualitas Demokrasi di Indonesia Electoral Digitalization and Disinformation : Implications for the Quality of Democracy in Indonesia*. 9(1), 509–525.
- Hasanuddin, M., Maulina, Y., Zahira, Z., & Auliya, S. (2025). *Analisis Yuridis Terhadap Literasi Politik Oleh Komisi Pemilihan Umum Di Media Sosial Nur Lailatul Musyafa ' ah Pendahuluan Komisi Pemilihan Umum (KPU) merupakan sebagai lembaga agen dalam mengemas informasi seputar politik dengan baik dan untuk membentuk dan menumbuhkan kepribadian politik dan*. 5.
- Imawan, A. P. (2022). *Menata Demokrasi Digital Kesadaran Warga Negara dalam Upaya Menjaga Integritas Pemilu di Era Digital*. 4, 109–120.
- Kurniawan, M. R., Erawati, D., Setiawan, H., Raya, I. P., Kpu, K., & Kalimantan, P. (2024). *Digitalisasi : Strategi Komunikasi KPU Dalam Meningkatkan Partisipasi Gen Z Pada Pemilu 2024*. 3, 1375–1390.
- Mahpudin. (2021). *Gowaslu sebagai Electoral Technology : Keterlibatan Publik dalam Pengawasan Partisipatif Berbasis Daring Gowaslu as an Electoral Technology : Public Engagement in Online Based Participatory Monitoring*. 4(2), 1–21.
- Muhammad Imam Subkhia, A. F. (2019). *Digitalisasi Verifikasi Faktual Keanggotaan Partai Politik Di Masa Pandemi Covid-19*. 258–280.
- Muhtadi, B. (2019). *Politik Uang dan New Normal dalam Pemilu Paska-Orde Baru*. 5(1), 55–74.
- Qurratu, F. (2024). *Digital Literacy Landscape of Novice Voters in the 2024 Election in*

Indonesia Digital Literacy Landscape of Novice Voters in the 2024 Election in Indonesia. 54(2), 115–124.

Rahmatunnisa, M. (2024). *Menyoal Tantangan Bawaslu Dalam Mewujudkan Integritas Pemilu Dan Pemilihan 2024.* 5, 118–128.

Sulistiyo, J. H., Endah, T., Lestiani, K., Sumanto, D., & Razak, A. (2025). *SiRad : Pelita Wawasan Legal Certainty of the Decision of the Election Organizer Honorary Council on the General Election Commission in the Implementation of the 2024 Election : A Review from the Legislation Perspective Kepastian Hukum Putusan Dewan Kehormatan Penyelenggara Pemilu terhadap Komisi Pemilihan Umum dalam Pelaksanaan Pemilu 2024 : Tinjauan dari Peraturan Perundang-Undangan.* 33–48.