The Development of Digital Democracy in Indonesia: A Case Study of Online Election Platforms

law&

Fauzie Hikmatussalam Sutrisna¹*, Dwi Yanto Nugroho², Emanuella Ta Rebo³ London School of Public Relation Sudirman Park

*Corresponding author: hikmatfauzi55@gmail.com

Abstract

Much research has been done on the development of digital democracy in Indonesia and in other countries, but there are still few that add to the development of democracy in Indonesia in 2024. This research aims to analyze the development of digital democracy in Indonesia, especially the use of online election platforms. The method used is qualitative, namely by conducting a review of the previous research literature and other sources. The results of the study stated that the development of digital democracy in Indonesia, especially the use of online election platforms, continues to increase, where the percentage of voter participation and transparency in the last two elections, namely 2019 and 2024, is above 81%. The contribution of this research is to provide an overview to election organizers that not all voters can use online election platforms, especially voters in rural areas.

Keywords: digital democracy; online elections; participation; transparency

Introduction

In the era of globalization and advances in information technology, digital democracy has become one of the important aspects of the government system in various countries, including Indonesia. The concept of digital democracy refers to the use of digital technology to strengthen public participation in the political process and decision-making (Dad & Khan, 2023). One of the real implementations of digital democracy in Indonesia is through online election platforms that aim to increase public participation in the democratic process (Kristiyanto et al., 2023). With the number of internet users continuing to increase, which reached around 202 million people in 2022 (Indonesia Internet Service Providers Association, 2022), the use of digital platforms in elections is becoming increasingly relevant. In this context, online elections are one of the important aspects that reflect the advancement of information and communication technology in strengthening public participation in the democratic process (Alvin, 2022). Indonesia, as a country with a large and diverse population, faces challenges in implementing online elections, which will have an impact on people's political participation.

Since the implementation of digital elections, many significant changes have occurred in the way people interact with the political system (Congge et al., 2023). Online election platforms not only make it easier for voters to access information, but also increase transparency and accountability of the election process (Yamin et al., 2024). However, behind the convenience offered, there are challenges and risks that need to be overcome, such as data security, the spread of inaccurate information, and the digital divide among various levels of society (Sumartias et



al., 2023). The application of information technology in the election process is expected to increase transparency, accountability, and efficiency. According to data from the General Election Commission (KPU), voter participation in the 2019 election reached 81.93%, the highest figure in the history of elections in Indonesia (KPU, 2019). However, despite the increase in participation, challenges in terms of public trust in the electoral process remain, especially related to the issue of fraud and data manipulation (Anas et al., 2024).

Indonesia: A Case Study of Online Election Platforms

Although the development of digital democracy through online election platforms in Indonesia shows great potential, a number of significant issues still need to be addressed to ensure its effectiveness and sustainability, such as data security and protection, digital divide, disinformation and hoaxes, limited infrastructure, regulations and policies, transparency and accountability, and cultural resistance (Fauzi et al., 2024; Rahmanto, 2022). In addition to offering solutions in addressing existing gaps, online elections can provide easier access for voters, especially in remote areas. In addition, online elections also allow for faster and more transparent vote counting (Paskalino Dadi et al., 2024). From the description and problems above, this study aims to analyze the development of digital democracy in Indonesia, especially the use of online election platforms.

Literature Review

Technology Acceptance Model (TAM)

The Technology Acceptance Model (TAM) is a theoretical framework used to understand and predict how users will accept and use new technologies (Förster, 2024). This model was developed by Fred Davis in 1989 and focuses on two main factors that affect the acceptance of technology, namely perceived usefulness (PU) and perceived ease of use (PEOU). TAM states that there are two factors (PU and PEOU) that influence users' attitudes towards the use of technology, which in turn affects their intention to use the technology (Desmaryani et al., 2024). In other words, if users find the technology useful and easy to use, they will be more likely to adopt and utilize the technology. This model is widely used in various fields, including government information technology, education, politics, business, and others (Tan & Taeihagh, 2021). By understanding the factors that affect the acceptance of technology, especially in the implementation of the democratic process, namely elections, it will be possible to see how public participation and transparency in its implementation are.

Digital platforms refer to information technology-based systems or environments that enable interaction, communication, and transactions between users, service providers, and various other digital resources (Kemppainen et al., 2023). The platform serves as a bridge that connects various actors in the digital ecosystem to achieve specific goals (Putra et al., 2023). The existence of a digital platform will certainly be very beneficial in 1) increasing efficiency, namely simplifying the communication and transaction process between users and service providers, 2) expanding the reach where it is able to reach a wider audience without geographical limitations, and 3) encouraging innovation through collaboration and exchange of ideas among users (Imawan, 2023).



The existence of digital platforms is certainly influenced by various factors including individual, social, economic, psychological, technological, environmental, and factors from previous experiences (Bachmid & Djanggih, 2022). The implementation of direct elections certainly requires large funds, where polling stations (TPS) must be provided. In Indonesia itself, every election is held \pm 800,000 polling stations. In addition, at the time of implementation, the time needed to vote is \pm 6 hours. So the community must take a special time to go to the polling station. With the existence of digital technology, the implementation of voting is not constrained by the place at the time. Where the community can vote wherever they are. So that it is possible to increase community participation in voting.

Challenges and Opportunities of Digital Democracy

Digital democracy can be defined as the use of information and communication technologies to increase public participation in political processes and decision-making (Fuad, 2014). According to Norris (2012), digital democracy includes various forms of interaction between the government and citizens, including the use of online platforms for elections, public consultation, and vote mobilization. In Indonesia, this concept is increasingly relevant considering the high penetration of the internet and the use of social media among the public. In the context of elections, online election platforms function as a means to facilitate the voting process, vote counting, and submission of election results (Amin et al., 2023). With online elections, it is hoped that the democratic process will become more inclusive, where every vote can be counted accurately and quickly. According to data from the Indonesia Internet Service Providers Association (APJII), in 2024, internet penetration in Indonesia will reach 79.5%, with more than 200 million internet users (APJII, 2024). This figure shows the great potential to implement online elections in Indonesia.

The concept of digital democracy brings its own challenges, one of which is the need for adequate infrastructure to support online elections. According to research from Setiawan and Sari (2020), information technology infrastructure in Indonesia is still uneven, especially in rural areas. This can result in a gap in voter accessibility, thereby reducing the effectiveness of online elections. In addition, people's digital literacy is also an important factor in the success of online elections. Research by Sari and Prabowo (2021) shows that there are still many people who do not understand how to use digital platforms for voting. On the other hand, online elections also offer opportunities to increase transparency and accountability. With an integrated and technology-based system, the voting process can be monitored in real-time. This can reduce the potential for fraud and increase public confidence in the election results. Overall, the concept of digital democracy and online elections in Indonesia shows great potential to strengthen people's political participation (Sustikarini, 2020). However, to achieve these goals, attention needs to be paid to infrastructure, digital literacy, and cybersecurity. Proper and planned implementation will be the key to success in facing existing challenges.



Method

The method used in this study is a qualitative approach with case study analysis (Creswell, 2023). This study will analyze several online election platforms that have been used in general elections in Indonesia, such as the 2019 election and the 2024 simultaneous election. The data was collected through interviews with stakeholders, including election organizers, platform users, and information technology experts. In addition, this study also uses secondary data from official reports, surveys, and relevant journal articles. Statistical data on voter participation, internet access, and use of digital platforms will also be analysed to provide a clearer picture of the impact of digital democracy in Indonesia. This analysis aims to identify the challenges and opportunities faced by online election platforms in the context of digital democracy.

Number of Voter Participation in the Digital Era Election

Voter participation in elections in the reform era, namely 2009-2024 Indonesia, shows a varied trend. It can be seen in figure 1 below:

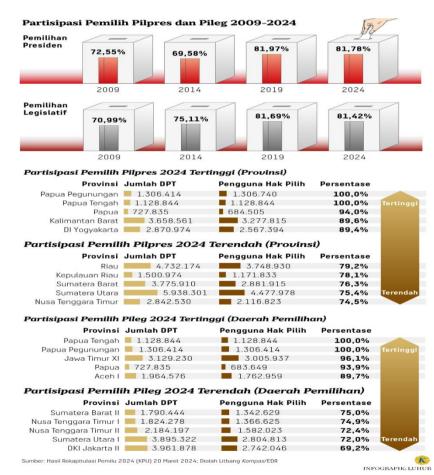


Figure 1. Voter Participation in the Digital Era



Fauzie Hikmatussalam Sutrisna et al – The Development of Digital Democracy in Indonesia: A Case Study of Online Election Platforms

Figure 1 above explains that voter participation in elections in the digital era, especially in 2009-2024, the highest number of voter participation, both presidential/vice president (81.97) and legislature, was in 2019 at 81.97% of the presidential election and 81.69% of the legislature. Meanwhile, the 2024 election has decreased where voter participation in the presidential election is only 81.78%, and 81.42% for the legislature. This decline is caused by the number of hoaxes that are developing in the community.

The Development of Digital Democracy in Indonesia

Since the digital era, the development of democracy in Indonesia has continued to show an increase in public participation from every implementation, both presidential and vice presidential elections as well as legislative elections. It can be seen in table 1 below:

18	Table 1. Community Participation in the Digital Democracy Era		
Year	President/Vice President Election	Legislative Elections	
2009	72,55%	70,99%	
2014	69,58%	75,11%	
2019	81,97%	81,69%	
2024	81,78%	81,42%	

 Table 1. Community Participation in the Digital Democracy Era

Source: KPU of the Republic of Indonesia

Table 1 above explains that the development of community participation in the era of Digital Democracy in Indonesia continues to increase, where public participation in the last two elections, namely 2019 and 2024, is above 80%. This indicates that the quality of the implementation of digital democracy in Indonesia is good, and also indicates that the level of transparency of election organizers is good.

The results of a literature study that discusses the development of digital democracy in Indonesia show that the use of online election platforms has had a positive impact on the increase in the number of voter participation (Sustikarini, 2020). Based on data from the General Election Commission (KPU), there is an increase in the number of voters who use digital platforms to vote in the 2019 elections, with around 15% of voters using online election applications (KPU, 2019). Although in the 2024 election there will be a slight decrease, which is caused by the rampant hoaxes ahead of the election. This shows that technology can be an effective tool to increase participation, especially among the younger generation. Data from the Central Statistics Agency (BPS) shows that voter participation aged 18-24 increased by 40% in the last election, compared to the previous election which was only 25% (BPS, 2023). This shows that technology has played an important role in attracting the attention of young voters, who previously tended to be apathetic towards the electoral process.

With the existence of online election platforms such as the use of the "Smart Election" application launched by the General Election Commission (KPU). The app provides complete information about candidates, political parties, and polling locations. According to a survey



conducted by the KPU, around 70% of application users feel more informed and confident in voting (KPU, 2023). This shows that better access to information can improve the quality of voter decisions.

The Development of Digital Democracy in Indonesia

The development of digital democracy in Indonesia from each event has increased, both from voter participation and transparency of its organizers (Wahyuningroem et al., 2023). This indicates that the development of digital democracy in Indonesia through online election platforms shows great potential in increasing public participation in the election process. Despite challenges related to data security and the digital divide, the use of technology in elections can strengthen transparency and accountability (Noor et al., 2021). Therefore, it is important to continue to develop and adopt safe and inclusive technologies to ensure that all citizens can participate in democracy. However, despite the increase in participation, challenges always exist (Setyasih, 2023). Research by the University of Indonesia found that the lack of digital literacy among voters, especially in remote areas, is an obstacle to the use of online voting platforms. Only about 50% of the population in rural areas have adequate internet access compared to 85% in urban areas (University of Indonesia, 2022). Therefore, it is important for governments and election organizers to ensure that all voters, regardless of geographical location, have equal access to election information and platforms.

Conclusion

Based on the results of the study, the development of digital democracy in Indonesia, especially through online election platforms, shows significant progress in increasing public participation and transparency in the election process. This is shown by the results of the 2019 and 2024 elections whose voter participation is above 81%. It is hoped that the Government can improve digital infrastructure, especially in rural areas to ensure more equitable access to online election platforms. An educational program that focuses on digital literacy is needed, so that the public can understand and use the election platform properly. The KPU and other relevant parties must invest in better cybersecurity technology to protect the electoral system from threats. The government, civil society, and the private sector need to collaborate to develop policies that support the development of digital democracy. And it is important to regularly monitor and evaluate the implementation of online election platforms to ensure that this system runs well and is trustworthy. It is hoped that researchers in the future will conduct similar research to use quantitative research methods or mix methods, so that the results can be drawn.

References

Alvin, S. (2022). The Evolution of Political Party in Indonesia: PSI Towards a Digital Party. Jurnal Komunikasi, 14(2), 423–445. https://doi.org/10.24912/jk.v14i2.18352



- Amin, F., Swarizona, S., Kuncahyo, T., Arafat, Y., Oktarina, R. A., Taplai, T., & Ri, L. (2023). Digital Democracy Political Participation Through Technology in the Modern Era. In International Journal of Science and Society (Vol. 5). http://ijsoc.goacademica.com
- Anas, A., Arifin, I., Irwan, A. L., & Ansar, M. C. (2024). The The Application of E-Government in the Development of Village Government Democracy in Gowa Regency Indonesia. Jurnal Publisitas, 10(2), 173–185. https://doi.org/10.37858/publisitas.v10i2.420
- Bachmid, F., & Djanggih, H. (2022). The Future of E-voting Implementation in Indonesian General Election Process: Constitutionality, Benefits and Challenges. Varia Justicia, 18(1), 34–51. https://doi.org/10.31603/variajusticia.v18i1.6359
- Bawaslu. (2019). Laporan Partisipasi Pemilih Pemilu 2019. Jakarta: Badan Pengawas Pemilu.
- Congge, U., Guillamón, M.-D., Nurmandi, A., & Taqwa Sihidi, I. (2023). Digital Democracy: A Systematic Literature Review.
- Creswell, J. W. (2023). Research Design: Qualitative, Quantitative, and Mixed Methods Approaches (6th ed.). Sage Publications Inc.
- Cyber Security Indonesia. (2021). Laporan Keamanan Siber pada Infrastruktur Pemerintah. Jakarta: Cyber Security Indonesia.
- Dad, N., & Khan, S. (2023). Reconstructing elections in a digital world. South African Journal of International Affairs, 30(3), 473–496. https://doi.org/10.1080/10220461.2023.2265886
- Desmaryani, S., Soleh, A., Irmanelly, & Wiarta, I. (2024). Integration of technology acceptance models and government support to improve digital literacy. Heliyon, 10(14), 1–13. https://doi.org/10.1016/j.heliyon.2024.e34086
- Fauzi, R., Maryana, I., Milah, A. I. S., Busro, Hilmi, F., Paujiah, E., & Mulyana, R. (2024). The Digital Behavioral Patterns and Preferences of Millennials within Indonesia's Political Digital Landscape: A Case Study. Khizanah Al-Hikmah : Jurnal Ilmu Perpustakaan, Informasi, Dan Kearsipan, 12(1), 49–61. https://doi.org/10.24252/kah.v12i1a5
- Förster, K. (2024). Extending the technology acceptance model and empirically testing the conceptualised consumer goods acceptance model. Heliyon, 10(6). https://doi.org/10.1016/j.heliyon.2024.e27823
- Fuad, A. B. B. (2014). Political Identity and Election in Indonesian Democracy: A Case Study in Karang Pandan Village – Malang, Indonesia. Procedia Environmental Sciences, 20, 477– 485. https://doi.org/10.1016/j.proenv.2014.03.060
- Imawan, R. (2023). Digital Democracy: The Evolution of Indonesia Electoral Politics. In The SARPASS (Vol. 03, Issue 01).
- Kemppainen, L., Kemppainen, T., Kouvonen, A., Shin, Y. K., Lilja, E., Vehko, T., & Kuusio, H. (2023). Electronic identification (e-ID) as a socio-technical system moderating migrants' access to essential public services – The case of Finland. Government Information Quarterly. https://doi.org/10.1016/j.giq.2023.101839
- Kristiyanto, H., Arinanto, S., & Ghafur, H. S. (2023). Institutionalization and party resilience in Indonesian electoral democracy. Heliyon, 9(12). https://doi.org/10.1016/j.heliyon.2023.e22919



- Norris, P. (2018). Digital Democracy: The Role of Technology in Political Participation. Cambridge: Cambridge University Press.
- Noor, F., Siregar, S. N., Hanafi, R. I., & Sepriwasa, D. (2021). The Implementation of Direct Local Election (Pilkada) and Money Politics Tendencies: The Current Indonesian Case.
 Politik Indonesia: Indonesian Political Science Review, 6(2), 227–246. https://doi.org/10.15294/ipsr.v6i2.31438
- Paskalino Dadi, A. F., Ari Nugroho, D., J Kocu, E. M., Toroby, R. J., & Romario De Fretes, D. (2024). An In-Depth Examination of The Political Landscape in Indonesia: Unraveling Complexities in The Evolving Dynamics of General Elections, Political Party Evolution, and Multi-Dimensional CivicENGAGEMENT. In International Journal of Society Reviews (INJOSER) (Vol. 2, Issue 2).
- Putra, R. T., Taufiqurrahman, D. R., & H Sagala, K. J. (2023). E-Voting System for Election with Mobile Based Apps. International Journal of Research and Applied Technology, 3(1), 69– 78. https://doi.org/10.34010/injuratech.v3i1.9953
- Rahardjo, S. (2020). Pengaruh Teknologi terhadap Kepercayaan Publik dalam Pemilu. Jurnal Ilmu Politik, 15(2), 123-134.
- Rahmanto, S. (2022). Election in the digital period: a literature review. JISoP), 130(2), 130–139. https://doi.org/10.33474/jisop.v4i2.18249
- Sari, D. (2022). Literasi Digital dan Partisipasi Pemilih di Era Digital. Jurnal Komunikasi, 10(1), 45-60.
- Setyasih, E. T. (2023). Democracy in the Digital Era as a Challenge and Opportunity for Public Participation. Jurnal Pemikiran Administrasi Negara, 15(1), 28–39.
- Sumartias, S., Pulubuhu, D. A. T., Sudarmono, Adi, A. N., & Ratnasari, E. (2023). Democracy in the Indonesian Digital Public Sphere: Social Network Analysis of Twitter Users' Responses to the Issue of Nationalism Knowledge Test at the Corruption Eradication Commission (TWK-KPK). Jurnal Ilmu Sosial Dan Ilmu Politik, 26(3), 240–257. https://doi.org/10.22146/jsp.70896
- Sustikarini, A. (2020). Digital Democracy in Indonesia''s 2019 Election: Between Citizen Participation and Political Polarization.
- Tan, S. Y., & Taeihagh, A. (2021). Adaptive governance of autonomous vehicles: Accelerating the adoption of disruptive technologies in Singapore. Government Information Quarterly, 38(2). https://doi.org/10.1016/j.giq.2020.101546
- Wahyuningroem, S. L., Sirait, R., Uljanatunnisa, U., & Heryadi, D. (2023). Youth political participation and digital movement in Indonesia: the case of #ReformasiDikorupsi and #TolakOmnibusLaw. F1000Research, 12, 543. https://doi.org/10.12688/f1000research.122669.1
- Yamin, M., Rosyadi, S., Runtiko, A. G., Kurniasih, D., Wijaya, S. S., Darmawan, A., Satyawan,D. S., Wahyuningrat, W., Isna, A., Sulaiman, A. I., & Novianti, W. (2024). Analysis ofPolitical Party Accountability and Financial Assistance in the Context of Indonesian



Fauzie Hikmatussalam Sutrisna et al – The Development of Digital Democracy in Indonesia: A Case Study of Online Election Platforms

Democracy. Bestuurskunde: Journal of Governmental Studies, 4(1), 73–86. https://doi.org/10.53013/bestuurskunde.4.1.73-86

