

Institutional System Reform in the General Election Commission Through the Implementation of Digital-Based Applications

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Abstract

The advancement in science and technology, particularly in the information systems field, is proceeding rapidly. It is necessary to implement digitally-based applications to reform the institutional system to support the work and performance of the General Election Commission as the general election organizer. The qualitative research method explains and reveals how to reform the General Election Commission's institutional system by implementing digitally-based applications. Reference sources include books, scientific journals, laws and regulations, internet sources, and other relevant sources pertinent to this investigation. This study aims to discover, comprehend, and analyze information concerning institutional system reform at the General Election Commission via the implementation of digital-based applications. The research reveals that the General Election Commission is a state agency responsible for organizing general elections. Reform in an institution is necessary, a requirement of the times, due to the impact of technological advancements in all fields, systems, or orientation changes made to make things better than before. Changes made to the institutional system by the KPU have made it easier for the KPU to carry out its duties and responsibilities of providing the public with access to transparency, monitoring, and oversight at all stages of the election. Included are the Political Parties Information System (SIPOL), the KPU Member Information System and Ad Hoc Agency (SIKBA), the Civil Service Information System (SIMPEG), as well as the Protect Your Rights Mobile Application and the Check Members of Political Parties Candidates for Election Contestants Through ID number.

Keyword: General Election Commission; Institutional System; Reform

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INTRODUCTION

Rapid developments have occurred over time in information technology, particularly with the advent of the internet, which has encouraged various sectors of society to make the best use possible of this technology. The use of the internet in government has facilitated the implementation of e-government, which is expected to contribute to the empowerment of the community by increasing access to information, enhancing government services to its citizens, enhancing the interaction between business and government in related industries, and improving government management efficiency, and transparency in government.

The development of Science and Technology (Science and Technology) is very rapid, especially in the field of Information Systems (Information Technology/IT). The rapid development of information systems and information technology has also been regarded as an extremely valuable resource for businesses (government organizations and private organizations). Information systems and information technology not only play a role as a mere support but also have a role as a key operational, high potential, strategic role and can be utilized to support effectiveness, efficiency, and productivity in an organization. Information technology in the form of a desktop or website-based software is a very strategic choice for institutions to facilitate their work.

Technological and institutional advancements also impact contemporary democratic practices, specifically through the technical implementation of direct general elections (elections) and the General Elections Commission (KPU) as the state institution that organizes elections. In order to support the work and performance of the KPU, various updates and improvements to the institutional system are required to optimize the KPU's institutional function through this information system.

International Institute for Democracy and Electoral Assistance (International IDEA) research on 106 countries reveals that 60% of countries use technology for vote counting or tabulation, 55% of countries use technology for the voter registration process, and 35% of countries use biometric technology relating to fingerprints. 25% of countries use biometric technology for voter verification, and 20% use technology related to e-voting. In comparison, most countries use biometric technology for voter registration (finger or retina) and voter verification (25%). The use of technology in conducting elections depends on the circumstances and conditions of a country. Some employ technology at every stage of election administration, and those continue to combine technology with manual processes.

In general, information technology related to the administration of elections can be classified into several types, namely: (1) Voter registration systems are the technologies utilized to create and maintain voter registries; (2) Voter identification systems are technologies used to verify the eligibility of each voter at a polling place and to compare the voters who show up to the list of eligible voters. (3) Party and candidate registration systems are technologies used to register all election political subjects (political parties or candidate candidates) by evaluating necessary support conditions and designing ballot papers and vote counting forms. (4) Observer registration and accreditation systems are a technology for registering and collecting accreditation data for (domestic and foreign) election observers or researchers and issuing accreditation documents. (5) districting and boundary delimitation systems are technologies used to determine electoral districts or an electoral district (6) Electronic voting and vote-counting systems are technologies utilized in the voting and vote-counting processes; (7) result from tabulation and transmission systems are the technology utilized in the process of vote recapitulation. (8) Results publishing systems are technologies used to display and describe election results in the various required formats; (9) voter information systems are technologies related to information systems for voters related to elections (TPS locations, election regulations, information about political parties, candidates, and others); and (10) e-learning systems are technologies related to the capacity building of election organizers.

The positive benefits of the application of information technology in the administration of elections are as follows: (1) budget efficiency for the long term; (2) increase the effectiveness of



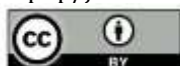
achieving goals; (3) increasing the transparency of the election process and results; (4) increase in data accuracy; (5) encouraging service quality improvement; (6) encouraging public participation in holding elections; and (7) encouraging the creation of electoral processes and results with integrity.

It is believed that technology has a method of operation that is more reliable, accurate, and capable of producing fast and accurate results, which makes election organizers interested in utilizing it. The use of information technology in organizing elections began with the 1999 election. At that time, the results of the 1999 election were input into a computer at the district/city level and then through the network owned by Bank Rakyat Indonesia (BRI) and Bank Negara Indonesia (BNI) and sent to the KPU. Twenty (twenty) years later, the administration of elections is increasingly dependent on information technology. During the 2019 elections, for instance, the KPU will utilize several electoral applications designed to aid and facilitate the conduct of elections. The Voter Data Information System (Sidalih) can assist election organizers in the transformation of hundreds of millions of population data into voter data. Sidalih was able to compile an accurate, up-to-date, transparent, high-quality, and easily accessible voter list. Also related to the application of the Vote Counting Information System (Situng) used by the KPU in the 2019 elections can bring transparency to the election results.

The next national election will continue to utilize information technology. Under Decree No. 12/TIK.03/14/2022 of the General Election Commission of the Republic of Indonesia on the Architecture of an Electronic-Based Government System for the 2021-2025 General Election Commission, the KPU has prepared 13 special electoral applications, 3 general public service applications, and 10 general government administration service applications for simultaneous elections in 2024. The use of this information technology is predicated on the desire to improve election administration and, ultimately, to increase the legitimacy of the election process and results among both election participants and the general public. The use of this information technology is a component of the KPU's institutional system reform in order for it to be able to improve its work and performance in accordance with the advancement of time and technology.

Research conducted by Ni Wayan Widhiastini in the *Dialectic Journal of Policies for Providing Performance Allowances at the Bali Province KPU (Perspective of Bureaucratic Reform)* in 2021 entitled *Dialectics of Policies for Giving Performance Allowances at the KPU of Bali Province (Perspective of Bureaucratic Reform)*. This study aims to understand how the implementation, inhibiting and supporting factors and the impact of the policy of performance allowances at the Bali Provincial KPU using qualitative descriptive methods. This result of the study shows that the performance allowance is applied with clear rules and standards (Widhiasthini et al., 2021). Supporting factors in the form of information technology, human resources and communication, as well as inhibiting factors in the form of information technology, discipline and customs. The impact of the policy can improve performance and discipline but in terms of discipline it is not optimal, this policy also raises fraudulent acts in absenteeism.

Research conducted by Piers Andrea Noak in 2024 entitled *Digitalization of Bureaucracy in the Public Area and Civil Society Welcoming the 2024 Pemilu*. The bureaucracy has intensified the principle of digital serving in providing public service, because digital services are demands that will be able to get closer to the community (Noak, 2024). However, it is necessary to optimize the implementation of digital because the essence of digital transformation is not only changing ordinary service to on line or by building application in the public and civil society areas aqully. The problem of digitizing the bureaucracy bureaucracy above, the purpose of this writing is to see how changes in the digitalization of the bureaucracy and public services within the state and civil society are basic elements of the basis of democratization in the modern state. Research methods of normative bureaucracy ethics and institutional organizational approaches within the framework of the statute approach, conceptual approach, and analytical approach, bureaucratic and institutional material tracing techniques usedocument study techniques, as well as study using qualitative analysis. Bureaucratic digitalization must ful filled within the bureaucracy, namely the



ability to adapt structurally and functionally, as well as the readiness of its human resources in public service and civil society.

Research conducted by Evsa Wulan Suri in the Pulpit Journal: Journal of Social and Politics in 2021 entitled Acceleration of Digital Transformation in Pemilu Governance in Bengkulu City. The research objective is to examine the extent to which digital transformation can be applied to all election stages. The research method used is a qualitative research method with a descriptive approach based on the philosophy of postpositivism, with primary and secondary data collection techniques for election management bodies and the voting public. The results of the research are that the EMB has made efforts to implement digital at all stages of the election, but not in its entirety due to several technical and non-technical obstacles (Wulan Suri & Yuneva, 2021). Acceleration of digital transformation in an effort to minimize risk by strengthening IT systems in accountable election governance, new voting methods, substantial legal changes in the electoral framework/system and faster secondary procedure improvements through election regulations.

RESEARCH METHODS

Research is a series of scientific activities involving the collection of data and the inference of conclusions about certain phenomena based on empirical symptoms. The methodology used in this journal is qualitative. The qualitative method intends to explain and reveal how to reform the institutional system at the General Pemilu Commission by implementing digitally-based applications. Reference sources for this research include books, scientific journals, laws and regulations, internet sources, and other relevant sources.

RESULT AND DISCUSSION

Institutional System Reform at the General Election Commission through the Implementation of Digital-Based Applications

To facilitate the implementation of its responsibilities as an election management body and to enable access to the broadest public in monitoring and supervising elections, the KPU continues to restructure its institution by deploying digital-based applications. The following are the applications currently being used in the institutional system Political Party Information System (SIPOL).

Sipol is a set of web-based information technology services that assist political parties with registering as candidates for the 2019 election by allowing them to provide information about their management, membership, and other political party-related matters. Sipol is part of efforts to efficiently and effectively organize elections in compliance with the Law-Invite. Sipol is not a KPU product that was unilaterally released; instead, it is a product that has been discussed with Bawaslu and the government and has a clear legal umbrella.

Political parties have significantly benefited from registering and verifying their participation in the 2019 general election (election) through the Political Parties Information System (SIPOL). Political parties can now manage member and management data from the national, provincial, and district/city levels with the help of SIPOL. Furthermore, political parties can verify and update data to fulfill management and membership requirements so that SIPOL can demonstrate accountability and transparency in the stages of implementing political party verification.

KPU Member Information System and Ad Hoc Agency (SIKBA) and Personnel Information System (SIMPEG).

KPU RI launched the Information System for KPU Members and the Ad Hoc Agency (SIKBA) as well as the Personnel Information System (SIMPEG), which was carried out as part of the activities of the Coordination Meeting for the Establishment of the Adhoc Election Organizing Body for 2024, on 20 October 2022 at the Claro Hotel, Kendari, Southeast Sulawesi, at 20.45 WITA by the Chairman and Members of the Indonesian KPU, the Secretary-General, and the ranks of the Indonesian KPU secretariat. All Heads of Provincial KPU Human Resources and Research and



Development Divisions, Heads of the Voter Education Dissemination Division, Community Participation, and Regency/Municipal KPU HR and operators from each work unit were also present in person at the launch site. To maximize publication, KPU RI also broadcasts these activities via Live Streaming via the KPU RI Youtube account. The activity was filled with the Socialization of the General Policy for establishing the 2024 Election Adhoc Board by RI KPU Member Yulianto Sudrajat. Ad hoc agency is vital in holding elections because ad hoc agency are vital in organizing elections, as the spearhead of the KPU, to recruit people with the right qualities.

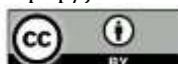


Figure 1. Display of the KPU RI SIAKBA application
Figure Source <https://lindungihakmu.kpu.go.id/>

SIAKBA is a set of web-based IT systems designed to make the process of choosing Provincial, Regency/City KPU members and ad hoc agencies easier (PPK, PPS, PPLN). While SIMPEG is a collection of web-based technology systems to facilitate employee data management, employee employment history records, and data management. As a result, this system handles details relating to ASN KPU employees (PNS and PPNPN) at the RI KPU and performs analysis and employee supervision.



Figure 2. SIMPEG KPU RI Application
Figure Source <https://lindungihakmu.kpu.go.id/>



A voter data information system called Sidalih is used to support election organizers' efforts in collecting, coordinating, announcing, maintaining, and serving voter data to voters. According to KPU regulations, article 1 point 46 states that the voter data information system, also known as Sidalih, is an electronic system and information technology that officers use to help compile, coordinate, announce, and maintain voter lists. The KPU uses this sidalih to support officers as they update and gather voter data. PKPU Number 11 of 2018 concerning Compilation of Domestic Voter Lists in the Implementation of General Elections.



Figure 3. SIDALIH KPU RI Application
Figure Source <https://lindungihakmu.kpu.go.id/>

Sidalih in elections was developed so that PPS, PPK, Provincial KPU, and Regency/Municipal KPU officers can use it to update and compile voter lists in a computerized manner without the need to cut voter data and group them to TPS manually. Sidalih performs the create, read, update, and delete (CRUDE) function in the voter data updating process. In addition, Sidalih publishes voter lists online on Provincial, Regency, and City KPU websites. What is no less important is that Sidalih has a monitoring feature that greatly assists the KPU in monitoring the voter list preparation process, providing information on the results of national data analysis (multiple potential data and invalid voter data). Sidalih was developed through an internet-based (web) which is single and centralized on the KPU server. Each Provincial KPU and Regency/Municipal KPU are only given access to process and update data in their respective working areas during the voter data updating stage. Sidalih is run by each operator at the Provincial, Regency, and City KPU but can also involve PPK members as operators at the sub-district level. In the process of updating data, not only using the internet but also being able to use the Spreadsheet application (Excel and formats that have been adjusted for the needs of the Sidalih application).

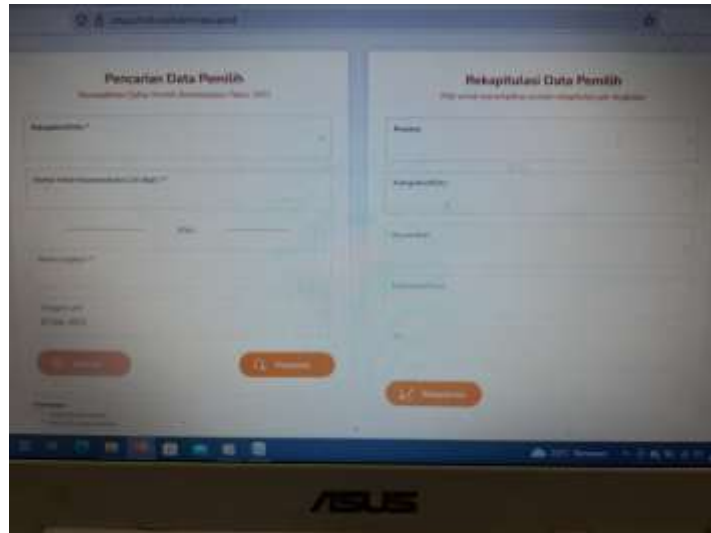


Figure 4. Lindungi Hakmu Application
Figure Source <https://lindungihakmu.kpu.go.id/>

Mobile Application Lindungi Hakmu. The KPU has introduced a new voter data mobile application called Lindungihakmu, which can be used by various groups, namely the public, political parties and Bawaslu. This application is based on Android and can be downloaded via Google Playstore.

Lindungi Hakmu Mobile application users include:

1. Public. The features that the public can use in using the Lindungihakmu mobile application are: (a) Checking whether they have been registered as voters; (b) Changing the data if the data elements do not match the e-KTP; (c) Register as a voter for those who have not been registered; (d) Reporting ineligible voters; and (e) Look at the recapitulation of the number of voters starting from the National level up to voting place;
2. Political Parties. Political parties can use the feature just like the public, but can see voters by name by pole station with some covered ID numbers digits by logging in first; and
3. Bawaslu. Bawaslu can use features like political parties and can click on the voter's name to be reported as an ineligible voter or to change data.



Figure 5. Application for Checking Members of Political Parties for Election Contestant Candidates via ID numbers

Figure Source <https://lindungihakmu.kpu.go.id/>

The features on the main page of the Lindungihakmu Mobile application display National Level Voter Data Recapitulation and several menus consisting of: (1) Columns for voter search based on NIK; (2) Voter Data Summary Menu; (3) List Menu to Become a Voter; and (4) Unqualified Voter Report Menu. Other features in this application include: (1) Check Voter Data; (2) Change Voter Data; (3) Voter Data Summary; (4) Register to Become a Voter; and (5) Report Voters Not Qualifying. Check the members of political parties for prospective election participants through id number. The public can check whether the name and/or NIK is recorded as a member of a political party or not.

CONCLUSION

The General Election Commission is a state institution that organizes general elections. Reform in an institution is a necessity, the demands of the times because of technological advances in all fields, changes made to the system or orientation order so that it becomes better than before. Changes to the institutional system made by the KPU have made it easier for the KPU to carry out its duties and functions in providing access to openness, monitoring, and supervision to the public at all stages of the election. Applications used include the Political Party Information System (SIPOL), KPU Member Information System and Ad Hoc Agency (SIKBA) and Civil Service Information System (SIMPEG), Protect Your Rights Mobile Application, and Check Members of Political Parties Candidates for Election Contestants Through ID numbers.

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