The Use of E Voting in the General Election System in Indonesia

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A R T I C L E I N F O

ABSTRACT

As a nation that conforms to the concept of democracy, Indonesia is expected to hold honest and fair elections that comply to the ideals of being direct, general, free, and confidential. In order for the results of general and regional head elections to insire confidence in all parties, openness and accountability must be referenced during these contests. Building a network architecture that enables transparent implementation of the election itself is one of the most challenging aspects of establishing a democratic party. This study intends to examine the future use of electronic voting in Indonesia's electoral system. This study employs a qualitative, descriptive methodology. In an effort to increase voter participation, reduce the impact of fraud in vote counting, reduce costs, and shorten implementation time, the results indicate that electronic voting can be used as an alternative method for general elections due to the Constitutional Court's decision number 147/PUU-VII/2009. Considering the circumstances of the 2019 election in which there were numerous casualties. In addition to having a positive impact, the implementation of e-voting also cannot be separated from problems such as short preparation time, budget problems, readiness of facilities and infrastructure such as uneven internet availability and finally the readiness of resources.

ABSTRAK

Sebagai bangsa yang menganut konsep demokrasi, Indonesia diharapkan dapat menyelenggarakan pemilihan umum yang jujur dan adil yang sesuai dengan cita-cita langsung, umum, bebas, dan rahasia. Agar hasil pemilihan umum dan kepala daerah dapat menimbulkan kepercayaan semua pihak, keterbukaan dan akuntabilitas harus menjadi acuan dalam kontes ini. Membangun arsitektur jaringan yang memungkinkan pelaksanaan pemilu yang transparan itu sendiri merupakan salah satu aspek yang paling menantang dalam membangun partai demokrasi. Penelitian ini bermaksud untuk mengkaji penggunaan electronic voting di masa depan dalam sistem pemilu Indonesia. Penelitian ini menggunakan metodologi deskriptif kualitatif. Dalam upaya meningkatkan partisipasi pemilih, mengurangi dampak kecurangan dalam penghitungan suara, mengurangi biaya, dan mempersingkat waktu pelaksanaan, hasilnya menunjukkan bahwa pemilihan elektronik dapat digunakan sebagai metode alternatif pemilihan umum karena putusan Mahkamah Konstitusi nomor 147/ PUU-VII/2009. Mengingat situasi pemilu 2019 yang banyak memakan korban. Selain berdampak positif, pelaksanaan e-voting juga tidak lepas dari masalah seperti waktu persiapan yang singkat, masalah anggaran, kesiapan sarana dan prasarana seperti ketersediaan internet yang tidak merata dan terakhir kesiapan sumber daya.

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I.   INTRODUCTION

The nation of Indonesia is recognized as one of the states that upholds the democratic ideal and has successfully carried out a number of general elections (elections) in order to choose its legislative representatives as well as its president and vice president (Natalia, 2015). With the direct election of regional heads, the governor and deputy governor, as well as regents and deputy regents, are also elected directly through elections. As a result, the frequency of this election is increasing, and it will likely continue to do so (Purwanti, 2015). It turns out that challenges in organizing elections frequently arise alongside the implementation of elections for regional heads, parliamentary members, and the presidency. These problems can make it difficult to reliably produce accurate results (Supriyanto, 2007).

Even if our nation has elections more frequently, this does not necessarily mean that there are fewer challenges involved in their organization (Solihah, 2018). Because, according to the data that have been accumulated, the difficulties in the general election are highly various. As a result, in the end, many parties have brought them into the legal domain, where they have been known as a General Election Result Dispute (PHPU) [Widjojanto, 2009]. Many of the disagreements that have arisen throughout the general election can be attributed to a few different sources, which include the following: To begin, the process of voter registration is plagued with a significant number of errors. During the elections in 2009, this issue was brought to the forefront on multiple occasions, most notably during the presidential and vice presidential contests. On the one hand, there are many instances in which the names of people who have passed away are still recorded in the voter lists. On the other hand, indigenous people who have lived in a village for a long time are not registered in the voter register. Additionally, it is very possible that a voter is registered on the voter list at more than one polling station (TPS). (Rokhman, 2011).

Second, many voters committed mistakes when marking their ballots, leading to the invalidation of several ballots (Simangunsong & Rasak, 2016). Thirdly, the ballot collection procedure was sluggish due to regional disparities in voting pace. Combined with the diverse geographical conditions of our nation, this can impede the spread of sound cards (Effendi, 2016). Fourthly, the vote counting procedure in each region was sluggish since it had to wait for all ballots to be collected before proceeding. Delays in the collection procedure will have an effect on the vote tallying procedure (Risnanto, 2013). Fifth, the delay in sending the results of the vote count. This is because regional communication technology infrastructure is inadequate. Therefore, tabulation centers must frequently wait a considerable amount of time for counting data provided from the regions (Suharsana & Wedasari, 2014). As a result, the announcement of election results will take a considerable amount of time. Sixth, it is highly probable that ballots will be systematically and clandestinely "sold and bought" for the benefit of particular parties.

The simultaneous elections in 2019 also set a terrible precedent in Indonesia's electoral history (Hartono, 2019). Because so many law enforcement officials became ill and died on the job. The head of the General Elections Commission, Arief Budiman, reported that 5,175 officials got sick and 849 died. One possible explanation for this problem is a very demanding and stressful workload (Mashabi, 2020). E-voting is being discussed as a way to streamline the voting and tally process and reduce the potential for human error, which might lead to another tragedy like the one in Florida in 2000. (Karmanis, 2021). Many people see electronic voting as a way to improve democracy and election administration, increase voter trust in the legitimacy of election results, and streamline and expedite the voting process (Wisnaeni, 2020).

E-voting is the use of electronic devices to cast and count votes in general elections. E-voting will be an option in future elections due to the Constitutional Court's ruling that Article 88 of Law No. 32/2004 Concerning Regional Government is constitutional so long as it is interpreted as allowing the use of e-voting accompanied by a record of cumulative requirements, namely the principle of elections that LUBERJURDIL can be implemented (Priyono & Dihan, 2015).

It is anticipated that the deployment of e-Voting will solve the issues that arise when using a conventional method (voting). In addition to resolving election-related issues, e-Voting can reduce implementation expenses (Edi & Fereshti, 2021). In the use of e-Voting, paper ballots are no longer used. To make selections, the e-Voting process involves clicking or touching the screen (touch screen). Modernity is embodied in the concept of e-voting for general elections, whose implementation modifies the procedures for holding traditional elections (Sutrisno, 2013).

II.   RESEARCH METHODS

For its methodology, this study relies on a qualitative strategy that adopts a descriptive stance. Sugiyono (2011) argues that qualitative research methods fall within the category of naturalistic research methods due to the fact that they include conducting studies in their "natural" environments. A qualitative methodology was selected for this study because it allows for natural data collection and analysis from the research participants. This is accomplished by gathering data in the form of facts that are disclosed in the language and perspective of the informants themselves. The goal of researchers is to collect as much detailed information as possible from informants, thus they aim to give them as many chances as possible to do so.

III.   DISCUSSION RESULTS

E Vote

Since E-Voting is a digital voting system, it can reduce election costs, reduce the number of people who vote illegally, and speed up the process of tallying votes (Shalahuddin, 2009). E-voting, as defined by (Lauer, 2004), is a method of voting that uses electronic means to collect, store, and tabulate votes. In essence, electronic voting (or "e-voting") is a digital voting process that begins with the registration and gathering of voter data and continues through the conduct of elections, the tabulation of votes, and the reporting of election results.

E-voting refers to the technique of leveraging electronic equipment to facilitate a more efficient procedure, as well as an automated model that permits little human interaction in all processes (Wijaya, 2017). i-voting, on the other hand, is a method similar to e-voting, but it uses information technology networks with a greater coverage area, with the Internet and communication technology as its foundation (Smith & Clark, 2005). Consequently, i-voting is associated with the internet system.

The use of electronic voting as part of a democratic party system has become increasingly common in recent years, and not just in the United States (Carter & Weerakkody, 2008). Countries like Belgium and the Netherlands use smart cards and touch-screen laptops for electronic voting, but these are just two examples of the wide variety of e-voting adoption patterns (Smith and Clark, 2005). According to Adeshina and Ojo (2006), the most important factors to consider when introducing electronic voting are accuracy and speed. Therefore, the adoption of e-voting is highly appropriate for archipelagic nations like Indonesia, since it will save a significant deal of time and money.

The implementation of e-voting is expected to overcome the problems that arise from conventional elections. The benefits that will be obtained in the implementation of e-voting are as follows:

a. Speed up vote counting
b. More accurate vote count results
c. Saves printed material for ballot papers
d. Save on ballot paper delivery costs
e. Providing better access for people with physical limitations (disabled)
f. Provide access for people who have limited time to visit the voting place (TPS)
g. Ballots can be made into different language versions

h. Provides access to more information regarding vote choice
i. Can control parties who are not entitled to vote for example because they are underage or exceed the age of voters that have been regulated

The implementation of general elections can essentially be divided into two ways, namely conventional paper-based methods and e-voting based on online technology. Online-based e-voting can be carried out in several ways:

a. Technologies based on optical scanning. Voters use ballot paper in this system, and the tallied results are tabulated digitally. This approach necessitates a complicated and costly design to produce ballots that can be scanned optically. Also, the scanner could get it wrong if the voter makes marks outside the ballot box. The term "e-counting" is used to describe this methodology.
b. DRE stands for "direct recording electronic," which describes the technology used to record audio directly. In this system, ballots are cast using electronic voting equipment, such as computers, touch screens, or electronic ballot boxes. The results of the vote are then recorded in the polling place's memory and forwarded either online or offline to the central vote counting facility. Voters will still need to physically visit a polling location, but election results can be tabulated and reported online in near real time.
c. Voting can be done electronically over the internet. By using a computer connected to a network, voters are able to cast their ballots from any location, with the results being recorded centrally. This method requires a wide band data communication network and reliable security

The decision of the Constitutional Court Number 147/PUU-VII/2009 in article 5; guidelines for implementing village head elections using E-Voting in Indonesia issued by the Agency for the Assessment and Application of Technology (BPPT); Article 85 of Government Regulation in Lieu of Law (Perppu) Number 1 of 2014 concerning the Election of Governors, Regents, and Mayors, voting for elections may be conducted using electronic voting equipment.

Because the urgency of e-voting adoption includes dangers to confidentiality and security, another key concern is whether e-voting adoption can minimize the number of abstentions. This is an important subject because a number of situations in various nations where e-voting was adopted did not significantly improve voter turnout. As a result, it is reasonable for Schaupp and Carter (2005) to emphasize the necessity of all parties' understanding before implementing e-voting, so that the deployment of e-voting itself can be better accepted by all parties without setting a harmful precedent.

With this knowledge, Nevo and Kim (2006)'s arguments become very fascinating to investigate in regard to efforts to compare each election implementation technology, from traditional to more modern systems, including e-voting and i-voting. The goal of this comparison procedure is to reduce risk because technology adoption in various forms cannot be divorced from the danger of risk11. As a result, innovation in the election system will undoubtedly continue to evolve toward a more perfect improvement because this is also related to human rights and the importance of voter involvement in the growth of democracy in a country. This means that, while e-voting is now the most secure option, it is not the only one

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The entry of the COVID-19 pandemic in Indonesia in early March 2020, paralyzed all human activities, including the democratic process. The democratic process that is reflected in the near future is the regional head elections held throughout Indonesia. The 2020 Pilkada will be held simultaneously in 270 regions in Indonesia (CNN Indonesia, 2020). The E-Voting system is a solution during regional head elections in the midst of the COVID-19 pandemic (Prayoga, 2021).

Voting on election day can be done with electronic voting equipment, as stated in Article 85 (1) letter b of Law of the Republic of Indonesia Number 10 of 2016 concerning the Second Amendment to Law Number 1 of 2015 concerning Stipulation of Government Regulations in Lieu of Law Number

1 of 2014 concerning the Election of Governors, Regents, and Mayors to become Laws. In Article 85 (2a) The Regional Government's and the community's readiness in terms of infrastructure and readiness are considered when electronic voting is used, with efficiency and ease as the guiding principles.

Jimly Asshidiqie suggests that there are four areas where the use of electronic voting is necessary. Planning for E-Voting begins with getting the election administration staff and participants ready, gathering the necessary population statistics, making any necessary technological preparations, and getting the community ready. The use of the E-Voting technology in general elections offers the benefits of being simple to calculate, holding elections, preventing fraud, and decreasing costs. E-Voting will make tallying votes and compiling statistics easier, resulting in faster, more accurate results. In comparison to more traditional, often inefficient voting techniques, the E-voting system represents a significant improvement.

By implementing E-Voting, voters will certainly find it easier to carry out the election process. The E-Voting selection process uses a Direct Recording Electronic (DRE) system and a touch screen. The use of the E-Voting system is also able to reduce numbers and perceptions of fraud during the election process and vote recapitulation. The implementation of conventional elections makes the General Election Commission (KPU) have to prepare ballots and ballot boxes. The cost of implementation is quite large, the implementation of the E-Voting policy will certainly cost less, because electronic machines can be used many times.

In its implementation, there are still ineffectiveness and inefficiency, such as budget waste in organizing elections, the slow process of tabulating vote-counting results, numerous human errors (Human Error), a high number of fatalities from the Polling Station committee, and election organizer fraud. According to Huefner (2014), election outcomes difficulties can be caused by a number of factors, including the following:

a. Fraud. Vote fraud is perpetrated by fraudulent candidates with the purpose and means to commit fraud. Vote counters and election officials typically have the opportunity to simplify this process.
b. Mistakes. Mistakes made by election officials. If this issue can be remedied through recalculation prior to the election, it will not be a concern.
c. Non-fraudulent misconduct. There are several actions that can erode public faith in election results. A group of candidates may purposely split the votes of other candidates in order to increase their vote total.
d. Ectrinic happenings or divine deeds. The occurrence of natural occurrences (acts of God) that are beyond the ability of human election administration officials to control.

The implementation of the E-Voting system brings effectiveness and efficiency in the electoral process. On the other hand, several countries have also implemented an electronic election process. However, in the midst of the advantages given, there are problems if the implementation of E-Voting is carried out in the 2024 simultaneous elections, namely: first, when the regional head election is held in February 2024. Of course, if we implement the E-Voting system, it only has one and a half years. and very short. Moreover, there is a need for a budgeting process, system planning and so on.

In addition, socialization of e-voting within the community is required. Article 85 of the Law of the Republic of Indonesia Number 10 of 2016 Concerning the Second Amendment to Law Number 1 of 2015 Concerning the Stipulation of Government Regulations in Lieu of Law Number 1 of 2014 Concerning the Election of Governors, Regents, and Mayor Becomes Law regulates the implementation of the E-voting system. However, the legislative framework to protect the implementation of E-Voting from difficulties such as hackers, etc., is still insufficient. Third, Safety Hackers who are able to breach the system pose the greatest threat to the introduction of e-voting. KPU data leakage is one of the incidents in Indonesia involving attempts to hack a website. Hackers allegedly sold information about Indonesia's 2,3 million-person population on dark web forums.

This incident demonstrates the need for a robust security system in the E-Voting process to prevent hacking occurrences.

Access to the internet is the fourth point. The usage of the internet is required in order to carry out the process of implementing electronic voting. Despite this, Indonesia's society has a propensity toward heterogeneity, and there is evidence of a digital divide in the country. Voters are required to physically be present at the TPS in order to cast their ballots if the application of the electronic voting system uses Direct Recording Electronic (DRE) and a touch screen. Therefore, if the implementation of E-Voting using DRE and Touch Screen is going to be exactly the same as non-EVoting, then it will certainly be the same. Because in reality the deployment of the E-Voting system is meant for the general population so that they don't assemble at polling stations to reduce the number of people who test positive for COVID19. (5) The Risk of Politics It is certain that the introduction of the electronic voting system would be accompanied by some dangers, which will need to be held in mind during its introduction. One of the dangers is the influence of politics on the process of implementing the electronic voting system, which is intimately connected to the reliability of election results (Kamaliah, 2020). In the event that there is fraud in the electronic voting system, the risk is very high and has the potential to have an effect on the political instability in Indonesia:

CONCLUSION

Indonesia has a tremendous chance to introduce electronic voting, which will improve the quality of democracy in the country. In addition to reducing errors and voter fraud in voting, which frequently result in invalid ballots in general elections, this e-voting method allows for immediate recapitulation of vote acquisition, which can shorten the time spent counting ballots. Internet voting, optical scanning, and direct recording electronic (DRE) systems can all be used for electronic voting. The E-Voting concept can facilitate the execution of effective and efficient direct elections and reduce the likelihood of vote counting manipulation. E-voting in the General Election can boost the value of democracy in Indonesia, particularly through expanding public participation and enhancing the electoral process's effectiveness and efficiency. However, the deployment of the E-Voting system is still hampered by the funding, infrastructure, and the community's readiness to accept e-voting.

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