Use of Information Technology in Counting (Situng) and Recapitulating (Recapitalized) Votes for the 2024 Election

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Abstract

General elections are a concrete manifestation of the implementation of democracy in Indonesia which provides a role for every citizen to be able to directly participate in selecting public officials. Democracy and democratic elections are "qonditio sine qua non", the one can not exist without the others. In the sense that elections are interpreted as a procedure to achieve democracy or a procedure to transfer people's sovereignty to certain candidates to occupy political positions in a country. Based on Law Number 7 of 2017 concerning General Elections (Election Law), information on election results can be obtained after going through several stages and requiring a long waiting time. This is because the vote counting and recapitulation system still adopts conventional methods. In principle, the process for the counting and recapitulation system can be flowed as follows: After the voting is complete, then the vote count is carried out at the TPS level and followed by filling out the vote counting certificate manually with a large number of copies. After that it was sent to the District level for manual recapitulation and filling out the recapitulation certificate with a large number of copies. The recapitulation process, like in the Kecamatan, takes place and is tiered at the District/City level, Provincial level and National level. With a process like this, in addition to the potential for errors caused by human error and it also takes quite a long time which then has the potential for fraud to occur so that it requires the use of adequate information technology in the process.

Keywords: Information Technology, Calculations, Elections.

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1. Introduction

The concept of people's sovereignty is in accordance with Article 1 paragraph (2) of the 1945 Constitution of the Republic of Indonesia, the owner of state sovereignty is the people, but the executors of people's sovereignty are state institutions or state officials appointed by the Constitution. General election (Election) is the procedure and mechanism for converting the people's votes which become the chair of state administrators, namely the legislative body and the executive branch, both at the national level and at the local (regional) level.

General elections are a concrete manifestation of the implementation of democracy in Indonesia which provides a role for every citizen to be able to directly participate in selecting public officials. Democracy and democratic elections are "qonditio sine qua non", the one can not exist without the others. In the sense that elections are interpreted as a procedure to achieve democracy or a procedure to transfer people's sovereignty to certain candidates to occupy political positions in a country.

The basic problem of implementing elections in the contemporary era has experienced a shift from merely technical matters of implementation towards demanding the level of accuracy of election results as a form of the implementation of substantial democracy. In this context, the proposed election system is something important and must reflect the "one unit" form of election aspects which cannot be separated from one another. Election practices that only designate two elements of ceremonial elections as the implementation of procedural democracy, namely the process of selecting and counting votes, are no longer relevant along with the development of information technology. In this context, even though changes or improvements to the election system are important, without being accompanied by clearly measurable quality results, this will set a bad precedent for

public trust (Alvarez, 2009). Indicators that often come up and can influence public trust are the level of transparency, accuracy and accessibility of the public in the election results.

At the same time as the conventional election system, the development of public knowledge related to increasingly sophisticated information technology is also followed by the easier it is for someone to access information, be it news, social media and so on. Thus, the factor of accuracy and speed of information on election results is one of the most important factors today. Especially for the presentation of information related to the interests of voters' votes which can have a very broad impact. As an illustration, in carrying out activities via the Internet, people use networks that are interconnected between one device and another.

One of the ideas that emerged in fixing election problems was by taking advantage of the increasingly rapid rate of technological development. In addition, Indonesia has now entered the era of disruption 4.0, which has changed fundamental things regarding people's views and behavior and various processes in it caused by innovation and the development of increasingly advanced digital technology. This innovation is marked by advances in artificial intelligence technology, nanotechnology, quantum computers, biotechnology, internet of things, and so on.

Referring to the provisions of Law Number 7 of 2017 concerning Elections (Election Law), information on election results can be obtained after going through several stages and requiring a long waiting time. This is because the vote counting and recapitulation system still adopts conventional methods. In principle, the process for the counting and recapitulation system can be flown as follows: After the voting is complete, the votes are then counted at the TPS level and followed by filling in the vote counting certificate manually with a large number of copies. After that it was sent to the District level for manual

recapitulation and filling out the recapitulation certificate with a large number of copies. The recapitulation process, like in the Kecamatan, takes place and is tiered at the District/City level, Provincial level and National level. With a process like this, in addition to the potential for errors caused by human error, it also takes quite a long time, so there is the potential for fraud.

Based on the description above, the problem that will be examined in this article is the use of information technology in counting and recapitulating election votes in the previous year as a reference in the 2024 elections.

2. Analysis and Discussion

In the implementation of the General Election, the vote counting and recapitulation process has a strategic position. This is because this process culminates in the final result of voting to determine the election winner. In this process technical problems and fraud often occur. In fact, because of the very strategic nature of this process, the Election Law pays special attention to establishing a special forum to resolve disputes over election results, and this is at the same time proof that the counting and recapitulation process is a complicated process.

A year before the 2019 elections, the Association of Indonesian Internet Service Providers (APJII) and Polling Indonesia conducted a national survey to measure internet usage in Indonesia. The survey was conducted on 5900 samples/respondents representing all regions in Indonesia aged 5 years and over. As a result, in 2018 the number of internet user penetration was 64.8 percent or 171.17 million people. Internet users this year increased from the previous year by 54.68 percent or 143.26 million people. Furthermore, of the 64.8 percent of internet users, only about 4.8 percent have used the internet for less than a year. Furthermore, around 93.9 respondents use the internet every day via

smartphones/cell phones in a span of 3-4 hours (14.1 percent) with the biggest reason being social media (19.1 percent) (APJII, 2018).

The high wave of demands for the disclosure of election information that guarantees data accuracy has become a necessity amidst the proliferation of survey institutions supported by the high access to election information through information technology. Thus, as a form of adequate service to the need for information on election results to the public, the General Election Commission (KPU) publishes the results of vote counting to the public via Situng, which can be quickly and accurately accessed by the wider community. Situng is basically the result of entry and scan results of Form C1 data at the polling station level. Regardless of all the obstacles that arise in its implementation, election results data that can be known quickly is an important requirement in information disclosure to the public (Huntington, 1994).

The Election Law designs the Election System using conventional methods which emphasize the role of TPS officers as the basis for election results data at each TPS. Vote counting at TPS is carried out by opening and counting all the ballots that have been punched, then pouring the results of the candidate's votes on a big board (form model plano). Furthermore, from the results obtained in the plano model form, the KPPS officer copies the results on the official report and certificate of vote acquisition (Forms Model C, C1, and attachment C1). With the large number of parties involved in this process and the many types of ballot papers that must be counted, the vote counting process often creates many problems. In addition, the copying of the official minutes and certificates of vote acquisition given to all parties participating in the vote counting process (field supervisors, witnesses of political parties participating in the election, and individual witnesses participating in the

election) is prone to generate typographical errors which have an impact on differences in the minutes and certificates. The votes cast for these parties.

Meanwhile, the vote recapitulation process is designed in stages starting at the sub-district, district/city, provincial and finally at the national level. Such a long path certainly takes quite a long time. The time allocation for this process has been scheduled by the KPU for approximately 35 days. In addition, with a manual system in the vote counting and recapitulation process, including preparing copies of the official report and certificate of vote acquisition at each level, it can open up space for fraud and manipulation of vote counting, so that the presence of technology is expected to overcome and close this gap. The KPU is aware of the potential for errors and fraud, so to overcome these problems the KPU uses Situng information technology.

Situng was designed in order to maintain a credible election process and results, by promoting transparency and openness of public information. Situng is an instrument for collecting election vote acquisition data contained in the Model C1 form at the polling station level. The Situng Design by publishing the Model C1 form, of course, apart from building trust from the public and election participants, it is also to ensure data accuracy. With this method, the KPU not only promotes the principle of transparency in vote counting and recapitulation, but also allows everyone to trace the correctness of the vote count results at each TPS. The public can even compare it with the election results tabulation released by civil society, including "Election Guard". These two election results tabulations present the election results and scan the C1 model, so that the public has a comparison of data from various sources to oversee quality election results.

However, in the practice of the 2019 simultaneous elections, Situng did not fully run as optimally as the community's initial expectations for fast and accurate information on

accurate election results. At least the criticism of Situng can be explained as follows. First, Situng Legality. There were election participants who criticized the use of Situng, where the Election Law did not explicitly mention the use of Situng. Initially this criticism was motivated by the follow-up election, re-voting in the 2019 presidential and vice-presidential election. One of the winning teams said that the publication of vote acquisition through Situng would affect voter preferences, thereby harming one of the election participants.

Apart from that, criticism of the Situng system which is not yet fully perfect also often surfaced. Constraints to this system include server downtime and network constraints, making it difficult for regional operators to input and upload C1 scan results. Moreover, network and infrastructure constraints for data input and uploading of the C1 model form in areas with weak networks. This causes uneven results of input and upload of data in each region. This issue later became the suspicion of certain parties that Situng had been engineered and had been previously set by the KPU.

Another obstacle that has a broad impact is the management of data in Situng. Data management here refers to all data in the form of numbers and images that are in Situng. Some of the obstacles encountered in managing this data include the fact that there are still more than 300 voters in each polling station. Apart from that, there was still a discrepancy between the valid and invalid votes and the number of voters present. The most serious problem in Situng data management is wrong data entry.

The vote information and recapitulation system or Sirekap is an election information technology system used by the KPU in the 2020 simultaneous elections. Sirekap is an Election technology application designed as a medium to convey information about vote counting results and their recapitulation more quickly. This application makes the process of implementing regional head elections at the recapitulation stage more effective and

efficient. Sirekap as an election information technology system has 2 functions: First, as an aid in the recapitulation process of vote acquisition results in stages. Second, as a media for publishing data on vote counting results from all polling stations and from every level of recapitulation to the public (Guidelines for Using Sirekap RI KPU).

The 2020 Simultaneous Pilkada Sirekap has two types namely; Mobile Sirekap and Web Sirekap. The Mobile Sirekap function takes photos, sends, and checks the suitability of the application reading with the Model C form. The TPS and Web Sirekap results function to oversee the recapitulation process in stages (KPU RI Sirekap Material, 2020). In the 2020 Simultaneous Pilkada, the e-recap Election information technology (Sirekap) in its implementation has provided an illustration of the significance of the application of information technology in the holding of elections, especially for the stages of vote recapitulation of election results. The implementation of the Indonesian Election which still adopts the conventional method where TPS count results are the basic data, so the use of e-recap (Sirekap) in the 2020 election is designed to convey basic data results by electronic transmission, by displaying and visualizing results in real time.

However, information technology in the Sirekap application has its own challenges and complexities, especially in the aspects of telecommunication networks and ad hoc organizing bodies. Information technology in Sirekap requires an adequate internet network with a good level of speed and quality. Sending data online is a record, especially for constrained areas. These obstacles are related to not all regions having adequate internet networks and even blank spots. Assuming that the sub-districts in Indonesia have reached 63.02% with adequate internet coverage, it must be understood that there are still many areas that have geographically difficult locations where the distance from village to sub-district town must be reached in a short time. In such an area it is not possible to shift briefly just

to transmit data, because geographical conditions sometimes require difficult land, river, and even sea transportation modes.

Then from the aspect of the readiness of human resources that have not met the standards, many KPPS members as TPS organizers do not have android cellphones, internet networks in very limited areas. This condition is contrary to the ideal goal that one of the benefits of the application of information technology should be to reduce the burden on election organizers. In addition to efficiency in the election budget, the application of election information technology improves the quality and accuracy of election data and encourages the creation of electoral processes and results with integrity.

Furthermore, specifically the use of information technology for the 2024 Simultaneous Election referred to in this paper is e-recap (electronic recapitulation), namely the stages of vote counting and recapitulation after the voting stage process at TPS has been completed. As a note in the implementation of elections in Indonesia, the KPU has used e-recap with the name of the Situng (Voice Counting System) application in the 2014 and 2019 elections as a process aid and not a final result document, considering that manual processes are still used as the basis for results. Legitimate. Furthermore, in the 2020 Simultaneous Elections, the KPU uses the Sirekap e-recap application (Recapitulation Information System).

The use of e-recap, both Situng and Sirekap, is a smart solution by the General Elections Commission (KPU) to control the development of the vote acquisition input process from basic data at each TPS as a form of commitment to fulfilling demands for accuracy of results in order to avoid possible irregularities . This is very important considering that the recapitulation stage has a position that is highly awaited by the public because this stage determines the final outcome of the contestation process.

Improvements are needed in the form of important elements in the evaluation process at each stage of the General Election, including the management of Situng. When it is known that there is a data entry error, the KPU takes steps to immediately correct the data entry error. In this case, the KPU is basically aware that Situng is not an official instrument in the election vote counting and recapitulation process, but the KPU is committed to trying to provide accurate information to the public quickly, even at the same time as the dynamic problems of the manual vote tally recapitulation process. Problems occurred in various areas.

The steps taken by the KPU in correcting the data entry errors are as follows:

1. KPU through the monitoring supervision team and data manager unverifies the account of Situng operator of regency/city KPU which has an entry or scan error

2. After unverification is carried out, the KPU through the monitoring supervision team and data manager provides information to the regency/city KPU through the provincial KPU that unverification has been carried out on the Situng operator account of the regency/city KPU which has an error in data entry or scan

3. Regency/city KPU situng operators make corrections to data entry or scan errors by entering data and re-scanning the data with the error.

4. After doing data entry and re-scanning, verification is carried out again and then sent back to the Web Site, thus the corrected data will periodically appear in Election info.

In addition to improvements to the technical aspects of data management, the KPU also made improvements to the system and increased data accuracy based on court decisions. To implement the RI Bawaslu Decision Number 07/LP/PP/ADM/RI/00.00/V/2019 dated May 14 2019, system improvements and data accuracy improvements are carried out as follows:

First, Situng System. System improvements that improve the quality of the results of the verification process in Situng which made several improvements to the Situng WEB application. One of the fundamental improvements is the improvement of the data validation feature which contains arithmetic errors to be made more eye-catching, by giving the cell data a red color, and giving the wrong number a yellow color. This can increase the awareness of Verifiers who will verify data with the status of "Incorrect Entry", so the application will display a clearer screen. More than that, KPU created a more sophisticated system as a Bawaslu Number 07/LP/PP/ADM/RI/00.00/V/2019 dated 14 May 2019. Situng has been upgraded by changing the alert system to a block system which allows the system reject voter data entry errors per TPS of more than 500.

Second, Data Management. As an openness to criticism, the KPU continues to periodically correct Situng errors, both from findings from the KPU and from public reports. These improvements were made as an effort to ensure the validity of the Situng data for wrong entries so that the data presented to the public is valid data and meets the transparency aspect because the public can see the improvements that have been made in Situng. In fact, the aspect of community participation in the repair of Situng has also been wide open, where One of the elements of repairing Situng comes from community report

In addition to improving the data, improvements were also made to the situng input mechanism which was constrained by the network in certain areas. Improve the mechanism that is constrained by this network, by instructing Regency/Municipal KPU/KIP with network problems to input data at Regency/Municipal KPU/KIP that has a good network.

Not stopping at improving SITUNG data and mechanisms, KPU also ordered Regency/City KPU/KIP to tighten SITUNG data input based on KPU Regulations and

imposed sanctions on Regency/Municipal KPU/KIP that did not complete input by the set time limit.

With the Situng management process running well in the 2019 simultaneous elections, to encourage the drafters of the Election Law to pay special attention to the use of information technology, the KPU can use Situng or similar information technology in implementing the 2020 Regional Elections using the pilot project method. This pilot project can be selected in areas that are structurally ready to carry out the use of information technology. In the context of this Election, Law Number 10 of 2016 basically provides an opportunity to utilize information technology in vote counting (e-counting) and election vote recapitulation (e-recapitulation).

To make this happen, KPU can regulate e-counting and e-recapitulation through KPU Regulations which legally apply positively regarding the use of information technology. With the formal use of information technology, all forms of strengthening and developing e-counting and e-recapitulation can be easily carried out because they are supported by adequate facilities, including budgets. The most important thing from the application of information technology that applies positively is that the documents contained in e-counting and e-recapitulation can be used as evidence in court so that it can make it easier for the parties to obtain digitally accurate evidence.

3. Conclusion

In the sense that elections are interpreted as a procedure to achieve democracy or a procedure to transfer people's sovereignty to certain candidates to occupy political positions in a country. Based on Law Number 7 of 2017 concerning General Elections (Election Law), information on election results can be obtained after going through several stages and requiring a long waiting time. This is because the vote counting and recapitulation system

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