



Conference

Electronic Digital Indentification (E-KTP) as an Element of E-Democracy in Indonesia

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Abstract. Indonesia has started implementing e-democracy in the general election process by determining e-KTP as a voter requirement. This paper explored Indonesia's efforts to develop e-democracy. Qualitative methods were used by applying desk research and triangulation methods. The results demonstrated that Indonesia is on the right track to develop e-democracy. Furthermore, various electoral processes have used different kinds of electronic media. In the future, it could be possible to implement e-voting and e-petition. Some challenges remain, including the digital divide, protecting private data, and resiliance of the system against hackers.

Keywords: e-democracy, e-KTP, e-government, society 5.0

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1. Introduction

Indonesia is now in the midst of a stream of change, in the course of the nation and state, which fundamentally leads to a governance system that is democratic, transparent, and legal supremacy. These changes provide opportunities for the arrangement of various aspects of the nation and state, in which the interests of the people can be put back in a central position.

The changes that are being undertaken are occurring at a time when the world is undergoing a transformation towards an era of information society. The rapid advancement of information technology and its potential for widespread use, opens up opportunities for accessing, managing and utilizing large volumes of information quickly and accurately. The fact has shown that the use of electronic media is a very important factor in various international transactions, especially in trade transactions.

Many laws and regulations have been issued to promote e-government improvement as a strategy to fulfill the public's will in demanding quality services on the one hand and the various limitations of the government and local governments in implementing e-Government have become a separate challenge that cannot avoided.

The implementation of the e-Government System in Indonesia is called Electronic Based Government System(1), hereinafter abbreviated as SPBE (Sistem Pemerintahan

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Berbasis Elektronik). The application of SPBE at the Central Agency and Local Government is intended for realizing an efficient, effective, transparent and accountable process as well improve the quality of public services.

One of the national programs for implementing SPBE is "e-KTP" or Electronic Identity Card. "e-KTP" is a citizen document containing a security system from both the administrative and information technology side based on the national population database. Citizens are only allowed to have 1 (one) "e-KTP" which contains a National Identity Number (NIK). The "NIK" is a single identity for each resident and is valid for life.

This research, which was conducted for the purpose of writing this paper, aims to look at the development and contribution of the adoption of e-KTP as an element of e-democracy that is being developed in Indonesia.

2. Methods

The research was conducted by applying qualitative methods using desk research and triangular methods. This method is used to examine a phenomenon in more depth. The study is intended as an attempt to obtain an authentic picture or essence of applying e-KTP in e-Democracy development in Indonesia.

The main data used in this research is provided from secondary sources. The data obtained in the form of documents and records in different form of media, both printed and electronic.

Qualitative analysis was carried out simultaneously with collection data. This means that data analysis was carried out shortly after the data or information are provided. Thus, if there are deficiencies then the providing data can be repeated again to obtain consistency of information. In addition, tabulations and descriptions of quantitative secondary data are also carried out in the form of tables and graphs.

The data obtained from secondary data is used as an input for analysis. The conclusions were obtained from the results of the analysis to answer research interest.

3. Results and Discussion

3.1. Rationale and Development of "e-KTP"

There is no doubt that taxes are the main source of income for funds government administration and development, because most of the state revenue comes from taxes. Therefore the taxpayer is the main actors who drives the wheels of development in all

fields in this country. On the other hand, the tax authorities also play an important role in collecting taxes from taxpayers. The success of tax management will be greatly helped if a country has a good citizen data and administration. One of the aspect of citizen administration among others, is in the form of a Single Identification Number (SIN), such as the Social Security Number in the United States.

Therefore, the initial idea of having SIN in Indonesia, emerged from the Directorate General of Taxes, Ministry of Finance, as part of an effort to increase the effectiveness of tax collection from the citizen. In its development, SIN was then linked to the population program in the form of "KTP" (Identification Card). In this "KTP" program, which is included in Citizen Administration Program, SIN is named as "NIK" or the Citizen Identification Number (*Nomor Induk Kependudukan*). The "KTP" program is then handled by the Ministry of Home Affairs.

Furthermore, to follow up the Citizen Administration Program, the government has enacted the Law Number 23 year 2006 concerning Citizenship Administration (*Administrasi Kependudukan*). This Law contains regulation and formation of systems that reflect reform in the field of Citizen Administration. One of the important things is arrangements regarding the use of a Citizen Identification Number (*NIK*). The purpose of the law is to provide protection, recognition, determination of the personal status and legal status experienced by Indonesian Residents and Indonesian Citizens (2).

Thus, Law number 23 of 2006 concerning Citizenship Administration basically regulates the following:

- 1. Citizen Protection,
- 2. Citizen Recognition,
- 3. The determination of the personal status and legal status of any citizen event and other important events.

Milestones of various policies related to citizenship administration in Indonesia (3) can be seen in Figure 1.

Based on various policies that have been issued by the government related to citizen administration, the provisions regarding e-ID in Indonesia are as follows:

- 1. SIN or "NIK" is an obligation for all Indonesia Citizen,
- 2. Citizen Administration Data is urgent to be developed,
- 3. SIN or "NIK" consist of 16 digits,

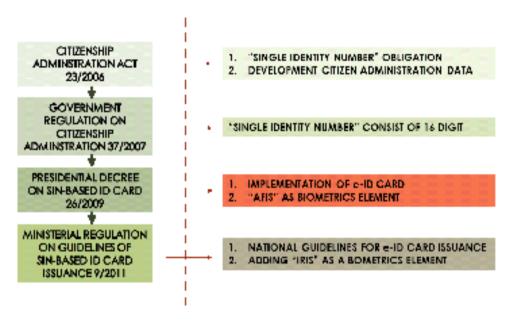


Figure 1: Policies Regarding Citizenship Administration. ((Source: Bratakusumah, 2017))

- 4. Implementation of e-ID or "e-KTP" for all Indonesia Citizen,
- 5. Automated Fingerprint Identification System (AFIS) and "Iris Recognition" are employed as Biometric elements.

The Indonesia Government's efforts to develop e-ID are in line with the efforts made by the World Bank with the support of various parties including the United Nations. This effort is called Identification for Development or abbreviated as ID4D.

According the the ID4D Practioner Guide (4):

"The World Bank Group's Identification for Development (ID4D) Initiative leverages global knowledge and expertise across sectors to help countries realize the transformational potential of digital identification and civil registration systems to achieve the Sustainable Development Goals (SDGs). It operates across the World Bank Group with global practices and units working on digital development, social protection, health, financial inclusion, governance, gender, and legal aspects, among others."

Furthermore, the mission of ID4D is to enable all people to access services and exercise their rights, by increasing the number of people who have trusted proof of legal identity. ID4D makes this happen through its three pillars of work (4):

- 1. Thought leadership and analytics to generate evidence and fill knowledge gaps;
- 2. Global platforms and convening to amplify good practices, collaborate, and raise awareness;



3. Country and regional engagement to provide financial and technical assistance for the implementation of inclusive and trusted digital identification systems that are linked with civil registration.

The ID4D initiative is: "ID4D brings global knowledge and expertise across sectors to help countries realize the transformational potential of digital identification systems. It operates across the World Bank Group with global practices and units working on digital development, social protection, health, financial inclusion, governance, gender, and legal issues." (5)

3.2. Urgency of e-KTP in e-Democracy

Many definitions define e-democracy, according to Caldow (6) e-Democracy is defined as:

"a government in which the supreme power is vested in the people and exercised by them directly or indirectly through a system of representation using information technology tools to facilitate, improve and ultimately extend the exercise of democracy."

While Macintosh (7) mentioned e-democracy as: "E-Democracy (a combination of the words electronic and democracy), also known as digital democracy or Internet democracy, is the use of information and communication technology(ICT) in political and governance processes."

Furthermore, Norris explained that: "E-democracy can also be more complex and can involve far greater interaction between citizens and government, including: the ability of citizens to reach and interact with governmental officials (e.g., via e-mail or other electronic means); online review of and comment on government proposals (budgets, land use plans, etc.) and regulations; citizen participation in governmental actions and decisions through such things as online forums, online consultations, and electronic town hall meetings; online referenda; online registration; e-voting; and more." In more detail the definition of e-Democracy is presented by Norris in two-part definition of e-Democracy as depicted in Table 1.

To this end, there is no doubt that the Indonesian government has realized that e-Government does not include only implementation of new Information and Communication Technologies (ICT), rather it refers to changing business models and processes with aim to enable different and efficient business processes. IT provides a solution, but e-Government refers to changes in the way government conducted. Including the implementation of the initial stage of e-Elections as the urgent step to e-Democracy.

TABLE 1: Definition of e-Democracy (all via electronic means)

A. Minimal Definition – Three Components

- Citizen access to information and services 2. Citizens' ability to contact and interact with officials 3. Citizens' ability to conduct online transactions with government
- B. Meaningful Definition Six Components Includes the three components of the minimal definition and adds:
- Citizen participation in governmental activities and programs 5. Citizen participation in governmental decision making 6. Voting.

(Source: Norris, 2007)

The application of e-Government in the process of democracy, in this case the Election, has been stated in Law No. 7 year 2017 concerning General Elections (7), particularly the requirements for having an e-KTP for voters. Article 348, paragraph (1) requires that voters who are entitled to participate in voting at Voting Station (TPS) include:

- 1. Registered e-KTP owner on the final voter list at the TPS concerned,
- 2. Registered e-KTP owner on the supplementary voter list,
- 3. e-KTP owner who is not registered on the final voter list and the supplementary voter list.
- 4. Residents who have the right to vote.

Thus, Indonesia has started implementing e-Democracy in the General Election process. Apart from determining the e-KTP as a voter requirement, electronic means were also implemented such as: email; social media; website; electronic mass media, and other electronic means for the electoral process.

The model of development of e-Democracy best described by the Institute for Electronic Government's. The model takes a leap forward in both the definition and implementation of e-democracy. The model is not limited to the citizen-to-government point of view, mapping progression from an informed to an engaged citizenry. It also serves as a scorecard of how successfully a government entity interprets and responds to the digital world and exploits technology accordingly to advance influence. The model is depicted in Figure 2.

Based on the e-Democracy model, it can be said that Indonesia is currently in Quadrant 1 and Quadrant 2. Whereas, Quadrant 1 is characterized by Most government entities have done a pretty good job of making information available online. That's



a fundamental step in e-Democracy tactics. While in Quadrant 2 is characterized by Government entities have made great strides to open two-way communication (5).

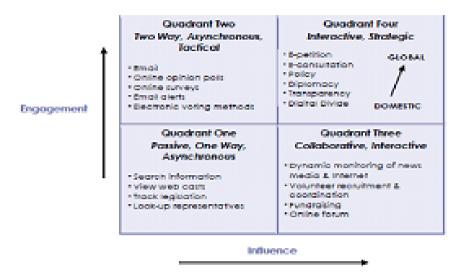


Figure 2: e-Democracy Model Institute for Electronic Government. (Source: Caldow, 2004)

Furthermore, starting e-Democracy is the beginning of the era Society 5.0. Whereas in the past, the common practice was to collect information via the network and have it analyzed by humans. In Society 5.0, however, people, things, and systems are all connected in cyberspace and optimal results obtained by artificial intelegence exceeding the capabilities of humans. This process brings new value to society, as well as democracy.

4. Conclusion

The various efforts of the Indonesian government in utilizing the advancement of ICT to support governance in Indonesia have developed rapidly in the last decades. Many regulations related to e-Government have been issued. Even the initial step of e-Democracy has also begun to implemented in General Elections.

Thus it can be concluded that with regard to e-Democracy, Indonesia is on the right track, and started by requiring e-KTP as a requirement to become voters. Furthermore, various electoral processes have used electronic media. In the future, it is hoped that e-Voting and e-Petition can be implemented in Indonesian Democracy, as an element of Society 5.0.

Therefore, in order for Indonesia to be able to implement e-Democracy properly, the following entities must be considered, (1) Hindered the digital divide among citizen, in order to increase equally participation in democracy, (2) The government must be in a



position to guarantee the security of citizen's privacy, and (3) The resilience of systems and applications used in e-Democracy from "hacker" interference, which is feared will disrupt democratic outcomes and processes.

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