The Content Analysis of Electoral Act in Indonesia: The Comparison of Percent Agreement and Cohen Kappa

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Abstract. This study investigates the legality of practitioners in interpreting UU PP (Electoral Act) to provide guidance in technical and managerial aspects especially in relation with principle of privacy by applying content analysis with percent agreement and Cohen Kappa. Thus, this study design code paper to be distributed to 21 coders to gain more understanding the approach which is appropriate to synergize various interest in election to bring more appropriate management to align with voters expectation especially in regard to privacy policy. The highest disagreement among coders occurred between coder 8 and 20 with -0.285 of Cohen Kappa and 0 of percent agreement while the highest agreement between coder 2 and 7 with 0.727 of Cohen Kappa and 93.2 of percent agreement.

1. Introduction
A series of legislation is a must to confirm that elections follow straightly and properly the principles of democratic, which in the context of Indonesia in accordance with 12 (twelve) electoral principles. Based on the legislation structure, the constitution develop state institutions whose officials are selected through general elections, deciding the principles of the election holders and their period, as well designates the organizing body. Then, the law creates the electoral objectives to regulate the process of determining the uses of the electoral system, the implementation process in the technical aspects and ensures that each rule is respected. At last, conducting the regulations is required to establish boundary or limits and strict the activity that enable the electoral process. Unfortunately, majority of people do not consider the privacy as the critical issues, especially when the collection process have been executed by the government, which mostly people are going to mention they are not hesitated to say that they do not keep anything off the record. Then they are going to mention that only when you make something wrong, then you have to worry or you have no right to hide it, that in fundamental aspect, it undervalue the people’s right to be left alone [1]. Therefore, government have three type of obligations, namely to respect (not interfering directly or indirectly with individuals activities related to the rights), to protect (taking action necessary to prevent the disruption from third party in the process) and to fulfill (facilitate, support, provide and promote the condition for realization in the maximum level) the right of citizen based on the constitutions [2, 3]. Interestingly, many has complaints the changes of electoral law in Indonesia during years before the next electoral process has begun, for example the addition of parliamentary seat in the district (i.e. west java; 100 to 120 seats) and national level (560 to 575 seats), which increase the operational budget borne by the state, likewise, increase tax income from other sector to meet with the needs. Besides that, government also
provide more donation to candidacy up to 2.5 million, 1.5 times higher than previous (1 million)[4]. On the other hand, there are also walkout from four factions when determining the presidential thresholds, which supposedly is not relevant anymore due to the elections held concurrently. Some also claim the legislation against the fairly attributes or discriminative, in which new political party should be verified based on the new regulation but the previous election participants. On the other hand, others mentioned the ambiguity of constitutional rights related to requirement to vote based on 17 years old or have been married. Furthermore, the recipients of bribes are not categorized as perpetrator in money politics, which can open many other possibilities of power abuse.

The law deals both with discrete interventions to secure and encourage public interest and safety of related action and to produce the good governance, which is developed fairly and efficiently in the public institutions and social structures [3]. This implies establishing priorities, monitoring results, transparency, participation of civil society, the fight against corruption and responsibility. Meanwhile, certain aspects of privacy have been applied in several laws like the Act No. 7/1971 on the Basic Provision on Archiving or the Act No. 36/1999 on the Telecommunication that addresses some important factors such as openness, accessibility, security, reliability and confidentiality. Nevertheless, because of the rapid technological advances, the current legislation is frequently ineffective to manage as well as to control the protection of personal data. The electoral framework must be comprehensive in order to achieve the conformity and harmony with the constitutional and regional guidelines. It is supposed to be constant and general but straightforward to the point of referring to the electoral principles to prevent political interest come into the picture to change the clauses and certain mechanism for the short-term goal or triggered by a particular event. This purpose of this study to analyze certain paragraphs in UU PP to identify the roles of the regulations in provision of the privacy principles with the aim of providing guidelines.

2. Principle of Electoral Act
The regulative interests in citizenship are substantive or procedural. Substantive regulative interests depend on the outcomes of the process of democracy, whereas procedural regulative interests depend on some intrinsic features of the process of democracy [5]. Furthermore, legal should consider the promises from e-voting so it can be translated well in the technical detail such as an increasing of participation and offers more options to the voters of convenience to vote, encourages more voters to cast their votes remotely, and has great potential to stimulate higher voter turnout [6]. Governments have to strive to make sure proper balance between the enforcement imposed on the individuals and the intended benefit to be achieved. Meanwhile, it also should accept certain borderline, in which the measurement of the burdensome is available and reasonably appropriate to mitigate the risks in every level of possibility. Therefore, the limitation is required to not unfairly overstep the ethical norm in the society [2, 6]. It is necessary to refine the original scheme, the implementation and a trial electronic election among the different development teams to ensure practical security on the server-side and separation of duty, which all security requirements are reached if any two components do not collaborate in order to violate the corresponding requirement [7]. Therefore, pre-auditing phase, testing result, tabulation rate error, usability issues, user interface simplicity and clear APIs are the example of the strict criteria that should be considered by e-voting guidance under legal umbrella to provide legal definition and general instruction. Consequently, it is highly necessary to conduct the process of monitoring to prevent crime such as theft, fraud and illegal use, to prevent the unauthorized disclosure of confidential information, to comply with the obligation, law and regulation to avoid discrimination, to maintain productivity as well as the quality of service and to ensure the integrity of the systems [8]. Equality can be guaranteed only if voters are properly identified to prevent unauthorized access or double voting calculation and if cast votes cannot be modified without leaving traces or ignored in the count [9].

There has been widespread concern about the expansion of government databases and the processing of personal data as a result, evidence suggests that the state is failing enough to enforce the right to the privacy [10]. It is crucial to develop a legal framework to exercise the right for re-using the
Information taken from the public sector where all of the agencies collecting, processing and storing personal data must take a series of formal organizational measures to guarantee that the personal data are protected (PDP) [11]. Furthermore, because of the rapid development of IT and communication by applying the Internet, many of these laws are still not appropriate with the current state of technologies and that is the reason that they should be revised to regulate the PDP at the appropriate level. There is also the objective to allow an efficient protection of reputation, in which previous case can be vital to interpret the arguments [12]. Moreover, there are several regulations that related to the general election namely Act No. 2/2011 on Political Party, Act No. 27/2009 about MPR, DPR and DPD (house representative), Act No. 8/2012 on house representative election, Act No. 42/2008 on President/Vice President election, Act No. 23/2014 about local government and Act No. 1/2015 about the election of Governor, Bupati (Regent) and Walikota (Major). Besides that, there are other regulations, which gives special authority for autonomous state such as Aceh, Jogjakarta, Jakarta and Papua to administer their own election. In certain period of time, the current regulation also can be modified through amendments or government substitution Act (Perpu). In general, the KPU as independent body can produce technical procedures through constitution mandate to avoid the inter-regulatory conflict when selecting the invigilator body to monitor the electoral execution. The risks, the advantages as well as the burdens of the interventions of public interest should be fairly shared, such as that vulnerable populations ought to not be subjected to strict measures or to be excluded (less priority) in the budget allocation. Electoral management bodies are necessary to assure the sufficiency in term of human capacity and financial resources to effectively involve in the electoral process of reformation [17].

In general, the Electoral Act explain 12 principles namely independence, honest, fair, legal certainty, orderly, public interest, openness, proportionality, professionalism, accountability, effectiveness and efficiency. Based on Act No. 15/2011, there are three main election organizer, which are general election committee (KPU), election supervisory bodies (Bawaslu) and honorary council of election organizer (DKPP). Interestingly, Parliament have been enacted new legislation in the form of Act No. 7/2017, which has many controversies around it such as presidential threshold, parliamentary threshold, magnitude of electoral districts, ambiguity of requirements, vote conversion and openness system. Still, the analysis of previous electoral act that keep changes ahead of the election can give a good picture of its role and importance.

3. Research Methodology

Content analysis have been utilize to evaluate certain prior problem of antecedent, mediation, influences and consequences in the case of implication and impact to address the question of what extent and the actor related for, which concern to accommodate the context and circumstances of the analysis has been taken into account [13]. The object to be analyzed is the previous legislation, namely UU PP 15/2011 to avoid controversy from the new one and considering the distinction is not much different. Meanwhile, percent of agreement calculate the point-by-point reliability based on the fraction of every possible observation occur, in which two observers approve certain criteria related to the object characteristics that is happened in specific situation [14]. It is almost difficult to obtain absolute certainty on the research’s result, even if the notable statistical is achieved [15, 16]. Generating the data, which purely based on the judgment or interpretation of observers (coders) can take any forms of kind in which category it belongs, how prominent it has magnitude within a unit and how often it occurs in the frequency.

|   | C1   | C2   | C3   | C4   | C5   | C6   | C7   | C8   | C9   | C10  |
|---|------|------|------|------|------|------|------|------|------|------|
| C1| 89.74| 33.33| 26.49| 26.92| 19.23| 84.62| 2.56 | 7.69 | 0    |      |
| C2| 0.599|      | 29.49| 33.33| 32.05| 26.92| 93.6 | 0    | 12.82| 1.28 |
| C3| 0.121| 0.057| 75.64| 52.56| 29.49| 29.49| 16.67| 25.64| 19.23|      |
| C4| 0.076| 0.109| 0.699| 47.44| 30.8 | 29.49| 15.39| 24.36| 20.52|      |
| C5| 0.058| 0.108| 0.414| 0.346| 33.33| 32.05| 14.1 | 20.51| 21.8 |      |
| C6| 0.015| 0.103| 0.124| 0.129| 0.161| 29.49| 0    | 30.77| 19.23|      |
| C7| 0.414| 0.727| 0.053| 0.051| 0.098| 0.133| 0    | 12.82| 0    |      |
This Act focused on the related body that have responsibility to conduct the election (KPU), the body that monitor the implementation of election (Bawaslu) and the body that decide the dispute of the election implementation as the basis in restricting the execution of the other related election legislation. The more coders agree on the generated data with the larger the sample of units, the more comfortable the study to claim and trust for its reproducibility and consistency. The highest score for the percent agreement are 93.6% (coder2 & coder7) followed by 89.74% (coder1 & coder2) and by three score with same value 84.62% (coder1 & coder7, coder2 & coder16, coder7 & coder16). There is zero value for percent agreement occurring as the indication of absolute disagreement between coders at around 15 times. It makes this Act becomes the most frequent of zero value occur in percent agreement analysis compare to the others. Meanwhile, it has four score below 5% agreement, which is 1.28% (coder2 & coder10, coder2 & coder17, coder10 & coder16) followed by 2.56% (coder1 & coder8), then by 7.19% (coder10 & coder16, coder10 & coder14). Mostly the coders think that this regulation has the absence of orientation or motivation, significance or principal and relevance of privacy in almost all verses while...
in the overall analysis, it is under weak status category of agreement. Actually, the average result of this intercoder reliability is not differs greatly or it have conflicted between each other. It can be concluded that the range of 6.4%, 10.26% and 15.38% of the number of data which indicate the incorrect data or misleading outcome. There is 41 out of 210 total combination, which has score of percent agreement above 40% as boundary make this Act become the lowest score in the result of intercoder reliability.

The largest score for Cohen's Kappa is 0.727 (coder2 & coder7), which shows a fantastic result of agreement. The next highest is 0.699 (coder3 & coder4) followed by 0.623 (coder19 & coder21). For its reliability; meaning that 28%, 30% and 38% of the data which are being analysed are erroneous. There is 36 out of 210 kappa coefficient that has score above 0.2 as boundary, which become the indication of overall coder's interpretation has no involvement of chance agreement or random choice. Furthermore, there is 30 times of negative score, which shows the status of 'no agreement' among the coders. Interestingly, if the comparison takes place between overall score and the possibility of erroneous, it points that the possibility of chance agreement of the coder evaluation is relatively low than the other regulation. There are several reasons behind it such as the number of verses for evaluation is relatively smaller than the other and the function of this regulation to connect with other related election regulation. There are many big problems happened during election campaign to be considered before the election day such as the involvement of many children, black campaign, politics intimidation, social isolation, primordial culture, money politics and absentee voters which impact the legitimacy of the election results and the attempts to protect personal data indirectly. Actually, this regulation is called as the ‘lex generalis’ law (umbrella law), which has a means for the main regulation to the other election related regulation. It does not seem to be a general standard of how to run and report inter-coder reliability tests, even though it is crucial to provide the answers to the assumptions which are in content analysis with a variety of measures are presented. The reason of this lack of uniformity is not so much that there are technical disagreements between researchers on which measure would be best but rather than the lack of enough information on the inter-coder reliability testing, how this kind of test is calculated and how the results from this test should be interpreted, which percent agreement as well as kappa have pros and cons [16].

The value in the percent agreement is quite easy to calculate due to easy interpretation of the results, which its key limitation does not take account of the possibility, that coders guessed on the scores and overestimate the true agreement among them. Meanwhile, the kappa has been designed to take account of the possibility to guess but the assumptions it makes of the coders' independence and other factors are not well supported, and consequently it may cause the estimate of agreement to excessively lower. It cannot be directly interpreted, and hence it has become general for researchers to accept low kappa values in their inter-coder reliability research. Furthermore, statistical significance means little when there is so much error appears in the tested results. It can be assumed that the low level of inter-coder reliability in this legal regulation is different from other research, which demands an exact and correct diagnosis of the result. The multitude of interpretations can be an implication for the general principle and concept of the regulation and thereby necessitates elucidation of articles or government instructions or even procedures, which explain further the principle and aim of the regulations in multiple cases. On the other hand, the transparency and the accountability are required to produce public confidence and trust in generating better process in supporting the election system. Therefore, the legislative commitment are also necessary to provide the fundamental for diversity in the policies creation under comprehensive law to address various problems in accessing the rights for the holder onsite or offsite and to improve the service to celebrate the election with satisfaction.

The desire for coherence in an integrated legal system show that at least in some areas, the doctrinal version of the law analogy will have significant work to do as its attachment based on philosophy and the objectives of legislature body that develop them [19]. In the case of invalid (ultra vires) regulation, the supervising governmental authority can be left without alternative but to take the units generated by the scheme that it is intended to be rejected later on [20]. Regarding personnel management, guidance or control, it should not be a particular responsibility of all inspectors and administrators to
supervise the integrity of the personnel of their account, in the monitoring and active intervention, in the prevention as well as the fight against corruption, transparency in work, justice and fairness, will always exercise the function of the presumption of not guilty as well as prioritizing precautions [21]. On the other hand, freedom can be guaranteed if the voters’ personal data cannot be traced back to their cast votes’ content, in which the traceability and accountability were separated [22]. In general, majority coders in this study who consisted of legal expert have been disagreed and disappointed toward the Electoral Act, in relation with providing personal data protection in election.

4. Conclusion
When there is a wide and complex part of the draft laws that will have far-reaching effects, it is imperative that direct and non-ambiguous chosen language be given priority. Every government must guarantee the potential challenges to enable the law in difficult political area will not be exacerbated by creating a deliberate exercise of confusion, especially when initial discussion show a tendency for more controversy and explicit opposition. The role of electoral law, which is free of political interest to respect, protect and fulfill the right to vote is extensively critical. The public ought to have a set of circumstances to take part in the creation of the law while the governments want to provide a comprehensive reasons for the decision-making process that somehow look like restricting personal freedoms. In conclusion, the percent agreement cannot specify the degree of disagreement among coders due to threshold of 0-1 while Cohen have the ability to identify the level due to range of -1 until 1 for inter-coder reliability. Thus, percent agreement present ambiguity in interpreting the score because relies too much to the proportion of agreement coded units and most suited for nominal type of data. It also does not consider the coders guess the score. Meanwhile, Cohen Kappa only can apply optimally in the categorical type of data with less corrected chance agreement oriented and do not take into account the type and sources of agreement.

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