Identification of Factors Affecting Electronic Participation: a Literature Review

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Abstract. This study aims to conduct a systematic review of technology adoption factors of electronic participation application in Indonesia. Application of LAPOR as Online People's Aspirations and Complaints Service has been developed to fulfill the public demands to actively participate in the formulation of government policies. However, there is limited understanding about technology acceptance regarding to users' behaviour especially in Indonesia. The method used is a systematic review with the PRISMA approach, consisting of five stages, namely defining eligibility criteria; define the source of information; literature selection; data collection and item selection with synthesis techniques. The results showed that there were 40 constructs of technology adoption of LAPOR application. The implication of this research is that government institutions could better understand what important factors that influence the adoption of technology.

1. Introduction

Based on Presidential Instruction No. 3 of 2003 concerning policies and strategies for developing e-Government, there are two public demands that must be fulfilled by the government, namely quality public services and public participation[1]. Regarding the second claim, the government must facilitate public participation and dialogue in the formulation of state policies. This is because basically the masses want their aspirations to be heard in the context of participating in overseeing the ongoing and ongoing government programs and policies.

In the opinion of Cohen & Uphoff (1977), one form of public participation is when people can express their opinions to assess, criticize, ask or provide input on a plan or program that will be determined and on a decision or policy that is running[2]. Through e-Government, people can now easily convey their aspirations to the government. One form of convenience from the benefits provided by e-Government is a simpler procedure in channeling aspirations without having to go directly to the government office. The community now only needs to access services through the government website provided. This certainly affects the shorter bureaucratic pathways, cost savings and time needed by the community. Thus, e-Government can be said to increase public participation where participation is carried out in the ICT domain or called e-Participation. Phang & Kankanhalli (2008) also explains that e-Participation occurs when citizens are empowered to actively participate by utilizing ICT in an online environment[3,4]. In addition, ICT also allows the public to participate in
several ways such as chat as a media or discussion forum, profiles that allow users to be part of a system and information provision that allows the public to convey information.

LAPOR application is one form of embodiment of e-Participation that serves as a service to handle the aspirations or complaints of citizens as seen in Figure 1. This application was developed by UKP4 (Presidential Work Unit for Development Monitoring and Control) and managed jointly with the Ministry of State Apparatus and Bureaucratic Reform (KemenPANRB). The application aims to provide convenience for the public to provide aspirations or complaints. So far, many residents have found it difficult to report complaints. In fact, not a few people also feel that they have not received a response to the complaints raised, or their complaints are often thrown here and there so that citizens feel disappointed with such treatment. Even though this has been regulated in Law No. 25 of 2009 concerning public services, in article 18 it is stated that citizens have the right to get responses to complaints submitted. More than that, the community also has the right to notify the government to improve its services if it is not yet in line with service standards. Facts on the ground, residents do not know how and where to go if they want to make a complaint[5].

![Figure 1. LAPOR Website for Public Participation [9]](image)

During the first administration of Susilo Bambang Yudhoyono (SBY), he made a breakthrough in communicating SMS (Short Message Service) and PO BOX mailboxes. The community can directly submit their complaint via a complaint and address SMS or PO BOX with number 9949. The complaint number is flooded with 500-600 SMS every day and within the first 3 months has received 13,045 complaints. The letters were immediately returned, some were channeled to the relevant departments and regional heads to be verified. The contents of letters and SMS vary greatly from extortion cases, illegal logging, corruption to personal problems. This method is actually quite effective in capturing citizen input and his efforts to get closer to people from all over Indonesia. But unfortunately the effectiveness of this program was not evaluated and the results were not reported to the public. Citizens cannot help the government's performance in completing their complaints reports. Residents also do not know the existence of the report they provided, whether the report has been followed up or not [6,7]. This is because the program cannot display all incoming public complaints and follow-up from related agencies or institutions. Another disadvantage of the program is that there is no certainty of time for reporters.

To overcome these weaknesses, UKP4 took the initiative to build a LAPOR Application which is supported by a communication channel, the LAPOR website! (www.lapor.go.id), mobile apps, social media Twitter (@ LAPOR1708) and SMS number 1708[7]. LAPOR application is one form of implementation of the mandate of Law Number 25 of 2009 concerning Public Services specifically Presidential Regulation Number 76 of 2013 concerning Management of Public Service Complaints. LAPOR application as a National Public Service Complaint Management System, it can be used as a forum for people to interact with the government more easily, while being able to actively participate
in overseeing development and public services. At the same time, the government has the means to capture community participation and map existing problems while finding solutions[5].

According to Mahendra et. al (2017), there are three main advantages to using the LAPOR application namely first, LAPOR an integrated information system has connected around 22,217 government agencies both ministries, institutions and local governments that are spread throughout the country so that the government can more easily collaborate with the public in overseeing development and public services. Second, the LAPOR application wide opportunities for the government to increase transparency and accountability because citizens are now able to track the whereabouts of their reports which are always documented and published on the website. Third, LAPOR empower citizens to provide reports more easily because without going through a complicated bureaucratic process, by utilizing various website technologies, mobile applications, social media and SMS [7,8]. It is proven that until 2019, the LAPOR apps has received as many as 605,847 reports from the public addressed to 208 ministries, 173 institutions, 847 regional agencies, 261 Regional Work Units (SKPD) and 2435 other agencies through various LAPOR channels [9].

Based on the benefits and facilities provided by the LAPOR application it further facilitates citizens to submit complaints reports regarding government programs and policies and public services provided. Until April 2015, LAPOR users the number has increased significantly to 290,000 with an average of more than 800 public reports per day[9]. LAPOR application also succeeded in encouraging the government to be more responsive and able to increase the closeness of public relations with the government. This is evident that the government has become more responsive to reports, aspirations and information conveyed by citizens. The 2014 data shows the government's response was able to resolve up to 78% of the total reports of residents who entered. The remaining reports are still in the process of being resolved and or have not been followed up. In other words, the LAPOR application able to eliminate bureaucratic divides between government and society [7].

Referring to the above indications, it can be said the LAPOR application said to be quite successful in becoming a nationally integrated media of public aspirations and complaints. This is also supported by various awards obtained such as winning the top three nominations for Government web award at Bubu award 2013 and one of the world's best initiatives at the 2013 Open Government Partnership Summit in London[9]. Therefore, in this study a review was made regarding the determinants of user acceptance from the LAPOR application. This is because research on evaluating citizen participation in the national scope in Indonesia is very limited, especially the LAPOR application. Thus the theoretical contribution of this research will complement the knowledge gap in the form of literature on citizen participation in the application of e-Government in Indonesia. Practically, this research can provide recommendations for the government in making policies related to the implementation of other e-Government systems, especially to increase citizen participation.

2. Method
Research on evaluating e-participation in the government nationally in Indonesia is very limited as a result of the lessons learned about what is a prerequisite and knowledge of the determinants of user acceptance of e-participation can also be said to be minimal. This study aims to conduct a systematic review of previous studies related to the factors of user acceptance of e-participation, especially the LAPOR application. The method used in this study is Qualitative Systematic Review with the PRISMA approach (Preferred Reporting Items for Systematic Reviews and Meta-Analyses).

PRISMA is a reporting technique that is used to present reports optimally from systematic review activities so that the results can be utilized effectively. PRISMA was discovered by Liberati et. al (2009) which has advantages in terms of transparency and complete reporting [10]. The stages of PRISMA can be presented in Figure 2 as follows:
In the PRISMA approach, the first important thing to do is to determine the eligibility criteria. This will determine the quality of the results of the systematic review. In this study, there were 3 eligibility criteria as follows:

IC-1: Refereed Research written in English and Indonesian Language related to the study of e-Participation especially the LAPOR application namely the national public service complaint management system. The implication is that there are quite a lot of research papers from Indonesian researchers.

IC-2: Research paper published in the past five years because it is relevant to the emergence of the LAPOR application since 2013-2014.

IC-3: Research is aimed at investigating citizen's acceptance factors with the LAPOR application in Indonesia.

In addition to the eligibility criteria, information sources are also an important element in the search for the desired article. In this study, information sources were accessed from Google Scholar and IEEE electronic databases. This is due to the limitations of obtaining studies related to citizen’s acceptance factors from the LAPOR application through other reputable databases like Science Direct and Elsevier (Scopus). The process of searching for articles is done based on keywords that have been determined, namely "e-participation" AND "LAPOR". After the article was obtained, further screening of articles that were significantly relevant to the research theme, namely citizen’s acceptance factors of LAPOR as shown in Figure 1. The process of article selection is done in layers to get quality articles through screening duplications, titles, abstracts, keywords, body of text, references and eligibility based on predetermined eligibility criteria. Furthermore, the process of data collection and selection of data items were carried out as the last step to report the results of the systematic review of citizen’s acceptance factors from the LAPOR application.

Figure 2. PRISMA Phase Diagram [10]
3. Result and Discussion

Based on the stages in PRISMA discussed in the previous section, the authors identified studies and screening based on eligibility criteria (IC-1 till IC-3) to obtain studies relevant to the objectives of this study. The selection process (screening) in this research can be presented in Figure 2 as follows:

![Figure 3. Study Selection Process](image)

Based on Figure 3, it can be seen that the results of the screening (screening) in the database initially produced 35 articles according to keywords and were written in English (IC-1) and published in the last five years 2014-2019 (IC-2). Furthermore, the articles were selected based on titles, abstracts and keywords, leaving only 15 relevant articles. 20 articles were excluded from the list because they did not meet the IC-3 eligibility criteria. Then the entire article is re-selected based on on base of full text. The total articles involved in the next process were 7 articles that were significantly relevant to the research theme where 8 articles were excluded because they did not meet the IC-3 criteria and there were no additional articles produced from the reference list.

The next stage is collecting data from 7 cross studies consisting of database source information, author, article title, publication year as presented in Table 1 below:
Table 1. Summary of Selected Study

| No | Database       | Author                                | Title                                                                                                                                                                                                 | Publication Year |
|----|----------------|---------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------|
| 1  | IEEE           | Khoirunnida et. al [11]               | Factors influencing citizen’s intention to participate in e-participation: integrating Technology Readiness on Social Cognitive Theory                                                                 | 2017             |
| 2  | Google Scholar | Rido Panjaitan[8]                     | Government in online spaces: critical evaluation of citizen-to-government participation in urban centres in java, indonesia                                                                                                                                  | 2018             |
| 3  | Google Scholar | Fathul Wahid[12]                      | Affordances and effects of promoting eParticipation through social media                                                                                                                               | 2015             |
| 4  | Google Scholar | Dinur Sadat[13]                       | M-government implementation evaluation in encouraging citizen participation in indonesia: a case study of LAPOR                                                                                                                                             | 2014             |
| 5  | Google Scholar | Wahyu Mahendra, et. al[7]             | Citizens’ Aspirations and Complaints Online System (LAPOR) in Indonesia: Making Citizens Happy Elemen Sukses E – Government: Studi Kasus Layanan Aspirasi Dan Pengaduan Online Rakyat (LAPOR) Kota Bandung | 2014             |
| 6  | Google Scholar | Nataya Anindita[5]                    | Elemen Sukses E – Government: Studi Kasus Layanan Aspirasi Dan Pengaduan Online Rakyat (LAPOR) Kota Bandung                                                                                                                                                    | 2016             |
| 7  | Google Scholar | Rheina Wulansari[14]                  | Peningkatan partisipasi warga negara dalam pelayanan publik melalui pemanfaatan laman layanan aspirasi dan pengaduan online rakyat (LAPOR) Di kota bandung                                                                                            | 2019             |

Table 1 above shows the results of collecting studies that are relevant to the research. In total there are 7 cross-study articles related to citizen acceptance factors from e-Participation, especially the LAPOR application. Articles obtained are in accordance with the IC-1 eligibility criteria (written in English and Indonesian) and most articles come from within the country. There are only 1 (one) article published in IEEE International Proceedings. This is because the theme of the research raised is related to the LAPOR national-based application. The entire article also meets the IC-2 eligibility criteria because of the range of article publications from 2014-2019 and according to the IC-3 criteria that are relevant to the investigation of citizen’s acceptance factors from the LAPOR application.

Furthermore, the next phase of PRISMA and is the last phase, namely the process of selecting data. Synthesis techniques are used to integrate all factors related to citizen acceptance of the LAPOR application in Indonesia. The results of data selection can be shown in Table 2 below:
Table 2. Synthesis of LAPOR Acceptance Factors

| No | Citizen’s Acceptance Factors | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
|----|-------------------------------|---|---|---|---|---|---|---|
| 1. | Ease of use & Simple Process | V | V | V | V | V |
| 2. | Cutting of Bureaucracy Process | V | V | V | V |
| 3. | Interactive & Communicative Services | V |
| 4. | Clarity and certainty of service | V |
| 5. | Service innovation and Multi-Features | V | V | V | V |
| 6. | Perceived Cost and Time of Citizen | V |
| 7. | Routinely Monitoring | V |
| 8. | Vision & Mission | V |
| 9. | Supportive Policy | V |
| 10. | Reward & Punishment | V | V |
| 11. | Leader’s knowledge and personality | V |
| 12. | Transparency & Accountability | V | V |
| 13. | Cost & Time Efficiency of Government | V |
| 14. | Increased involvement of citizens | V |
| 15. | Collaboration | V | V |
| 16. | Citizen knowledge and concern | V | V |
| 17. | Socialization | V | V | V |
| 18. | Motivation | V | V |
| 19. | Outcome Expectation Personal | V |
| 20. | Participation Self Efficacy | V |
| 21. | Optimism | V |
| 22. | Insecurity | V | V | V |
| 23. | Convenience | V | V | V | V |
| 24. | Integrated System & Multi-Channel | V | V | V | V |
| 25. | Compatibility | V | V |
| 26. | Legal Framework | V | V |
| 27. | Top Management Commitment/Political Will | V | V |
| 28. | Budget | V | V | V |
| 29. | Adequate Technical Skill Staff | V | V | V |
| 30. | Focus IT Shifting | V |
| 31. | Social Media Use | V |
| 32. | Support from parliament | V | V |
| 33. | System Quality | V | V | V | V | V | V |
| 34. | Information Quality | V |
| 35. | Service Quality | V |
| 36. | User Satisfaction | V |
| 37. | Intention to Continual Use | V |
| 38. | Trust of Citizen | V |
| 39. | Cross-Border Service | V |
| 40. | Fast follow-up/Responsiveness | V | V | V | V |

Table 2 above shows that the results of data selection with synthesis techniques produce a total of 40 factors that influence citizen acceptance of factors towards the e-Participation program, especially the LAPOR application. The synthesis process is carried out on 7 cross-studies that are significantly related to the research theme, namely citizen’s acceptance factors of LAPOR. The entire citizen’s acceptance factors are of an important nature that should be applied by government institutions to be able to increase citizen participation in the future through the application of e-Participation especially the LAPOR application in Indonesia.
4. Conclusion
This study has successfully demonstrated the systematic stage of literature review with the PRISMA (Preferred Reporting Items for Systematic Reviews and Meta-Analyses) approach and reports the results of synthesis related to citizen acceptance factors for the application of the LAPOR in Indonesia. The contribution of research theoretically enriches the literature on citizen’s acceptance factors towards e-Participation especially the LAPOR application which has been applied to the national scope since 2013. Research on evaluating citizen participation in the national scope in Indonesia is still very limited and therefore the contribution of this research to fill the knowledge gap has been carried out. The results of the study show that 40 citizen’s acceptance factors were obtained from both internal (government) and external (citizen) sides. All of these factors should be applied by both central and regional government agencies that want to implement the LAPOR application. The expected output is an increase in citizen participation, especially in terms of supervision of development and public services through the LAPOR application.

Acknowledgement
The author would like to thank for the funding support of Direktorat Riset and Pengabdian Masyarakat, Direktorat Jenderal Penguatan Riset and Pengembangan Kementerian Riset, Teknologi, dan Pendidikan Tinggi Republik Indonesia so the research could be conducted successfully.

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