

UDC 332

GOVERNMENT-CITIZEN COLLABORATION DURING PANDEMIC CRISIS AROUND THE REACHES OF KAPUAS RIVER

Simbolon Herson

Institut Pemerintahan Dalam Negeri, Kampus Kalimantan Barat, Sungai Purun Besar,
Segedong, Pontianak, Kalimantan Barat, Indonesia
E-mail: herson_smb@ipdn.ac.id

ABSTRACT

Reaches point around the Kapuas River is a strategic point that determines the environmental balance before it is directly connected to the coastal area in Kapuas Hulu Regency. This balancing environment covers many things, including the sustainability of the marine environment as well as existing sources of wealth. The increase in community needs which causes the waste volume which is also increasing linearly, also by the behavior degradation of social littering, this phenomenon is getting worse significantly and resulting in increasing pollution of the upstream flow of the Kapuas River. Based on the increasingly complex situation, this study aims to describe the joint involvement between the government and the residents of Kapuas Hulu Regency and other stakeholders in the implementing process of waste management policies during the Covid-19 Pandemic. Operationally, the research uses a qualitative approach to strengthen the research information presentation descriptively. The systematic literature study techniques uses are strongly emphasized into various social restrictions responses. Hence the research interview process is carried out through interactive dialogue online and offline. The results explained that the togetherness momentum between local governments and the community, especially in the context of waste management in Kapuas Hulu Regency, is still very minimal. It is clear that the interview results show that the portrayal of the common vision and interests of waste management goals, a sense of close connection during collaboration and the attainment of consensus in the context of developing collaboration, also shows a low tendency.

KEY WORDS

Sustainable, local government, waste management.

Nowadays, waste has become a crucial problem faced by urban areas including in developed and developing countries, including Pontianak City. City life is carried out very dynamically but accompanied by the phenomenon of waste that is emitted very much and varied, including synthetic chemical waste that is foreign to the natural environment, potentially dangerous, and cannot be recycled again. Therefore, it does not rule out the possibility that improper handling causes citizens' dissatisfaction with public services in the hygiene field.

The increasing volume of waste from hard-to-decompose materials in densely populated urban areas is alarming. Usually every the rural urban area has a considerable rate of increase in the waste volume, especially waste from plastic materials or those containing polymer compounds that naturally require a very long time to decompose by nature (Purwaningrum, 2016).

Pandemic conditions due to the spread of the Corona Virus (Covid-19) have resulted in a very complex impact on the structure of people's lives in urban areas such as Pontianak City. One of these complexities is the significant increase in the volume of plastic packaging waste. This phenomenon occurs because during the Covid-19 pandemic crisis, it has encouraged an increase in the number of requests for packaging that is lightweight and difficult to decompose naturally such as plastic waste (Sembiring, 2021). This phenomenon is increasingly dynamic because as one of the densely populated urban areas, the citizens' attention is not being focused on handling waste around their environment. Instead, it is

concentrating on the social restrictions implemented and focusing on household economic recovery in response to deteriorating economic conditions.

According to this phenomenon, this study also bases the discussion on the waste existence which are significantly increase during the Covid-19 pandemic crisis in the city of Pontianak. However, in a specific position, namely regarding the barriers to attachment between the government and city residents, which are increasingly limited to formulate together important steps that need to be implemented to overcome the problem of increasing the volume of plastic packaging waste. The opportunity to build public service policies that are appropriate for today's society is also experiencing a decrease in opportunities (the opportunities to engage with citizens) as Brainard & McNutt (2010) thought due to social distancing during the Covid-19 pandemic in most regions. In fact, this momentum is also one of the important pressure points for the realization of the implementation of public services in the new paradigm of new public service (Denhardt & Denhardt, 2000).

The Covid-19 pandemic is a new social dynamic faced by the residents of Bandung City and other residents in the world in general. Thus, a positive response to face waste management problems in the surrounding environment remains a common concern. The in-depth discussion of the study focused on the implication that the demand for plastic packaging has increased sharply as a consequence of the increase in household consumption in Pontianak City within the framework of spending from home. This implication then needs to be analyzed in depth about a new social equilibrium situation (Social equity) as the opinion of Brainard & McNutt (2010) that these implications provide an opportunity to build efforts to increase government collaboration with their citizens through virtual containers that make it possible to carry out public policy development that is truly relevant as a solution to solving development problems faced together. This momentum is very important considering that the results of the performance of handling the waste problem in the city of Pontianak only show the achievement of reducing the accumulation or volume of waste only by 0.47 percent (DLHK Kota Pontianak, 2021). In this explanation, of course, the government that is currently being run has extended its hand to invite the residents of the city of Pontianak to jointly pay more attention to solving the problem of increasing waste accumulation.

Since the announcement of the existence of Indonesian citizens who have contracted the Covid-19 virus by the government on March 2nd, 2020, the situation and structure of behavior in public services have also undergone drastic changes. Social restrictions began to be imposed in a structured and massive manner in anticipation of the spread of the Covid-19 virus which is more widespread and worrying. With such restrictions, it turns out that it has spread throughout Indonesia until now. Thus, public services that have undergone changes as a form of responsiveness to the dynamics of the situation and health emergency conditions in Indonesia still continue to find ways to improve practically and theoretically.

Academics and practitioners have also quickly found adjustment activities by trying to develop various solutions that can be a guide for humans to stay afloat beyond the challenges of the spread of the Covid-19 virus. However, research that pays deep attention to the research theme on the opportunities to overcome the spread of the Covid-19 Virus in the discipline of thinking efforts to realize Virtual Government in Indonesia has not run ideally following the dynamics of public services that must be faced during a pandemic. The phenomenon of developing this thought initially received a response from the business community who directly felt the compulsion of adjustment in terms of deciding strategies in strengthening coordination between all members of the organization. Initially, this organizational organizing technique made people communicate and coordinate and meet remotely without having to have face-to-face meetings in a place simultaneously. This reality is different were in the past when going to coordinate or conducting meetings, they had to travel to get to the same place at the same time. But with the current situation illustrates that the infrastructure that is already connecting the head office and branch offices can communicate video or virtually from their respective locations without having to gather in the same place (Randi, 2020).

So based on above explanation this study aims to describe the joint involvement between the government and the residents of Kapuas Hulu Regency and other stakeholders in the implementing process of waste management policies during the Covid-19 Pandemic.

LITERATURE REVIEW

Research that reveals the state of work implementation with certain social distancing limitations has become a top choice to maintain the rhythm of performance achievement for business organizations as well as the government sector. Previous scientific literature searches explain an interesting finding where in fact the thought of the terminology of working from home has long been sparked even though it is not motivated by the emergence of a rapid spread of the virus. Rather, it is a response to traffic congestion obstacles that interfere with professionals to reach strategic meeting places such as making decisions on organizational strategies (Nilles, 1988). Similarly, a study that was also carried out by Brainard & McNutt (2010) by prioritizing the use of the conception of virtual mediating structure. This proves that in the policy process for organizational sustainability, the methods and operations such as formulating, analyzing and making organizational policies are still dominated by the business sector even though the government sector has also realized and has begun to implement it even in the country of origin where the center of the spread of the Covid-19 virus itself, namely in China. (Bick et al., 2020). However, in the interests of research in themes that are directly related to the context of the realization of policies within the framework of improving public services, it is still very rarely implemented.

After the spread of the Covid-19 virus, the development of the use of interactive virtual media by the government sector has experienced a very sharp spike. The dimensions of the norms of living habits of urban people who feel that they have been affected first until now have continuously developed the process of remote teaching and learning for all levels of formal education (Randi, 2020; Solihin, 2020). Its use in the government sector still does not fully cover the widespread field of public services, which is limited to government institutions intended as virtual media as support for crisis centers (Priyatna, 2020). In the discussion, it can be clearly described that this research has placed the thoughts to be developed in the interest of presenting a new thought that is expected to be a solution and provide a direction for improving government practice that refocuses on developing the responsiveness of government together with the community and the business world to carry out policies in democratic public services. This is very likely to be an important stage in the future to strengthen the virtual form of democratic government with the people. This process will likely continue and be carried out on an ongoing basis because the structure of decision-making behavior or public policy in a virtual atmosphere will continue to be practiced and developed (Vyas & Butakhieo, 2021).

Based on the discussion of the phenomenon behind this research, it was decided that the purpose of this study was to describe the joint involvement between the government and the residents of Pontianak City and other stakeholders in the process of implementing waste management policies during the Covid-19 Pandemic.

The Involvement Between the Government, the Community and Other Stakeholders in the Public Policy Process

This section discusses the dimensions or aspects that need to be considered when comprehensively analyzing the involvement between the government, the community, and existing stakeholders to realize the implementation of public policies together in an atmosphere of social restrictions as the dynamics that develop when various regions are affected by the spread of the Covid-19 virus. The opportunity to foster the involvement of all subjects of development is certainly very open to momentum and a virtual atmosphere. Although the beginning of the health emergency in Indonesia has many doubts about its effectiveness, until the time this research was developed, progress was felt very rapidly so currently the existence of social restrictions in the framework of suppressing the spread of Covid-19 provides opportunities for joint involvement between the government and the

community more intensely and beyond the boundaries of location access. With the support of this dynamics development situation, the research then assumes that in the future the existence of intense government involvement with the community through joint virtual forums will greatly determine togetherness in formulating policies related to public services.

It is important to limit that what is intended in the thought of joint involvement between government and society in research is refer to the shared momentum in formulating, identifying problems and trying to formulate solutive steps that need to be implemented together. In the case of joint involvement between the government and other communities or communities that pay attention and interest to a policy related to public services, the identity of the subject needs to be recognized in depth first. This thinking about the identity of the subject includes two actors who have a relationship with each other, namely the government and its society (Campbell, 2005) or also mentioned as the tendency of the subjective identity of the parties involved (Brainard & McNutt, 2010). In reality, empirically discussions on the subject of community development are believed to tend the thoughts and ideas that are very different individually than in their communities for the public benefit. This means that socially this thought also believes in the inevitability of the construction of an individual's behavior after interacting and exchanging his thoughts and experiences together in the community (Campbell, 2005).

The next discussion explores the objectivity of the identities of those involved in government collaboration with the community together to identify and decide on alternative solutive measures for issues surrounding public services are not stand-alone factors. The objectivity of the subject's identity is influenced by the tendency of action in the joint forum and the relationships formed on the joint momentum between government and society (Campbell, 2005). Therefore, analyzing the objectivity level of this subject's identity is essential to explain the sense of connections among participants, communities, and their government. Relevant thoughts regarding the identity of this subject are also put forward by Brainard & McNutt (2010; 837), were looking carefully at the process of identifying problems together is very important so that all parties involved in the virtual interaction really understand the root of the problem that determines the effectiveness of solutive actions that need to be implemented.

More comprehend, a sense of belonging to the decisions to be taken regarding all joint decision-making for public services is a fundamental joint that is indispensable so that each party feels responsible for the decisions taken (Korti & Souad, 2018). The role of local government representatives who are very strategic in ensuring that this community engagement process goes well, namely presenting experiences, rules or signs, and governing on a broader level. It also shows that in the identity of the subject of government, knowledge, and experience regarding the limits of authority up to the resources necessary to realize public service policies are certainly more accountable (Brainard & McNutt, 2010). In the end, the resulting mutual understanding or consensus will strengthen alternative solutions to the problems faced, in the context of this study, namely problems related to public services in waste management in Pontianak City Center as a densely populated area during the period in early 2020 until present.

METHODS OF RESEARCH

The phenomenon that is used as the object of research is government management, namely waste management in Pontianak City. Disclosure and analysis of phenomena that are employ as the research objects using a qualitative research approach. The research approach is carried out by the method of descriptive analysis. The qualitative research approach was chosen because qualitative research is a research approach that diffuses the disclosure of phenomena according to the perception of research subjects who have the position, importance, and competence to uncover phenomena that are used as research objects in depth and holistically so that factual and actual images are obtained. This method is an approach developed previously by Lincoln & Guba (1988) which then the flexibility of its use is reinforced by thinking (Creswell, 2014).

Research informants are resource persons who are considered to have a relevant position, role, competence, and involvement to reveal various information and data regarding the identity of the subject in showing an objective tendency to the problems of public services carried out, a sense of connection as a form of the interactive process shown by each participant, as well as conditions of understanding through consensus that open up opportunities for the development of transformative implications for alternatives joint decisions are determined to be implemented, while the elements of research informants are determined by snowball technique based on the criteria of the position, role, competence and involvement that are relevant to become research informants.

Snowball technique is an informant determination technique that is carried out at the time of research by determining informants from one informant to the informant so that the number and elements of informants are achieved that are considered optimal to represent the phenomenon that is used as the object of research. Determination of research informants is carried out by a consultative approach and an affirmative approach according to the position of each informant.

This study uses the technique of testing and confirming empirical findings through examination of the representativeness of the information obtained, comparison of information, and interpretation of information. The general technique of testing the validity of the data is carried out using triangulation techniques. Meanwhile, what is meant by triangulation is carried out by considering three main things, namely triangulation according to the perspective of the implementer, namely the Pontianak City Environment and Hygiene Service and the Pontianak City Cleanliness Regional Company, the Community, and interested stakeholders such as communities that pay special attention to cleanliness and the environment in Pontianak City.

RESULTS AND DISCUSSION

The context of local government organizations contains the existence of networking factors and has become a very important part and is often even considered as a crucial resource that is able to boost organizational performance. A network that has a close relationship, especially with the Pontianak City Environment and Hygiene Department (Dinas Lingkungan Hidup dan Kebersihan - DLHK) and Regional Company (Perusahaan Daerah – PD). The cleanliness of Pontianak City should be able to provide support to the achievement of its management goals, which include; the possibility of sharing resources that will greatly help waste management service providers in Pontianak City face the challenge of limited resources, also with the increasingly widespread organizational work network developed towards achieving performance. The core conception that can be explained to describe the conditions of such networks will be very clearly seen in the realization of the cooperation implemented.

The research found indications of a weak collaboration process carried out between the subject of the Pontianak City waste management and hygiene service provider and the community, through the results of in-depth interviews it was also revealed that this situation was weakened when entering the Covid-19 crisis in Pontianak City. With the weak abortion carried out by the subject of the Pontianak city waste management and hygiene service provider with the community, it will have a bad impact on achieving the objectives in implementing the established waste management policy. Based on the results of observations made by researchers, it can be seen in the field that the lack of collaboration with related organizations and community elements, causes the waste produced per day to be transported to landfills (TPA) to increase again, this can happen because the people who cooperate in carrying out waste management in the environment where they live are decreasing, therefore the research continues several determining factors in depth regarding the objective identity between the parties involved in the collaboration process, the existence of a sense of connections in the participation process and the resulting consensus as a transformative effort to solve the problems faced (Campbell, 2005) in waste management in Pontianak City.

Objective identity

Objective identity explains the tendency of attitudes and behaviors related to the ideas and thoughts conveyed by each individual directly involved in interacting together to design solutions that are important to be implemented to solve the problems faced together. Meanwhile, during the Covid-19 pandemic, there were several joint momentums used by the local government in Pontianak City together with the community who paid attention to the increasingly worrying waste problem. This momentum was held through a webinar event as a response to the implementation of social restrictions to reduce the rate of transmission of the Covid-19 Virus. The webinar which was held explored several important themes related to waste management in the city of Pontianak, including efforts to optimize waste management policies that are being implemented, namely Pontianak City Regional Regulation (PERDA) No. 9 of 2018 with waste management (Pontianak Regional Regulation No. 9 year of 2018 on Waste Management, 2018).

There was a transfer of authority to the Pontianak City as government unit DLHK due to the problem of a significant increase in the volume of waste during the pandemic. Therefore, they involve two large agencies and the community. Within the scope of waste management, one of the lessons of DLHK is the running of waste reduction actions. moreover, the Pontianak City Government has a Movement to Reduce, Separate, and Utilize waste, so sweeping road operations, waste processing, and transportation are the main focus of waste management. For this reason, in carrying out technical activities for waste management operations, it is necessary to form a Waste Management Unit with the aim of being a waste collection function, waste transportation function and waste processing function.

Technical Implementation Unit (Unit Pelaksana teknis – UPT) Waste Management in carrying out its public service activities requires flexibility to be able to provide excellent service to the community. Therefore, the Waste Management Unit also proposed a Regional Public Service Agency (Badan Layanan Umum daerah – BLUD) financial management pattern. From the end of 2020 to 2021, DLHK as the implementer of waste management services consulted with Syncore Indonesia to prepare a blud system submission. UPT Waste Management as a technical implementer of DLHK in carrying out service activities.

With the issuance of Perwal Number 48 of 2020 concerning the Establishment, Position, Organizational Structure, Duties and Functions, and Work Procedures of the Waste Management Technical Implementation Unit, the Waste Management Unit has been established with the transition period process from Hygiene Regional Company to UPT as waste management agency.

Organizationally, is the only institution that has the authority to manage the cleanliness of the Pontianak city. This is an advantage with the regulation from the Pontianak City Government which is also the owner of the Regional Company. Kebersihan. However, the attachment between the company and the Pontianak City Government, makes the Hygiene Regional Company not fully able to take advantage of its independence and tends to place itself as part of government agencies such as the Regional Apparatus Work Unit (SKPD) or technical implementation units within the government bureaucracy in Pontianak City.

Sense of belonging to the decision

Decision-making has an important meaning for the progress or retreat of an effort to achieve common goals between government and society collaboratively. Making the right decisions will result in a change in efforts to achieve common goals for the better, but on the contrary, wrong decision making will adversely affect the wheels of organizing efforts and the administrative process.

Many dimensions will reap the benefits of having a shared sense of belonging to pre-made decisions collaboratively. For example, efforts to rise from the economic recession of a region and environmental degradation to other development activities (Debusquet et al., 2020). Clearly, the process of connecting with the government bureaucracy through parallel partnerships is actually listed in the value of the company and has been thoroughly attributed. The existence of a mutually beneficial partnership is symbolized as the doors and windows of a house, which connect the inhabitants of the house with the outside world. This

value is expected to be a reference for the viewpoint of all elements of the Hygiene Regional Company on their external environment, where all employees and decision makers must view various parties outside the company as partners to support the Hygiene Regional Company to be more advanced. Social responsibility is likened to a roof that overshadows it all, whereas Hygiene Regional Company when viewed from the outside can be seen as a socially responsible company. So if it is likened to, what a house is when viewed from above / sky, then what is visible is only the roof. These values then become a reference for all elements in the Hygiene Regional Company in carrying out their duties.

This is confirmed by the information of the research informant that Regional Company. Pontianak City Cleanliness as the only Regional Company in Indonesia that is responsible for the cleanliness of the city still has to prioritize partnerships. So even though the company is still supported by a relatively small budget at this time, we still cannot stop the waste management process itself. Because it returns to the company's values, where in addition to carrying out business activities, it must also provide cleaning services to the community.

Internal growth is carried out by developing a business that has been the core business of Hygiene Regional Company by further concentrating the use of its resources on more innovative waste management activities by improving services and developing waste handling products by utilizing appropriate and environmentally friendly technology.

External growth is carried out by developing business through strategic cooperation with various parties by forming strategic alliances and joint ventures with private companies that are well established and experienced in the field of cleanliness and integrated waste management. A concrete form of growth strategy is to selectively invest in related areas of business on the one arrow, and increase the efficiency of its business processes on the other. Investment in concentration, by extending the business but still focusing on the business that is now being carried out. Meanwhile, acquisition is diversified, expanding the business by opening other businesses that are still related to the company's main business.

Hygiene Regional Company also carries out its business strategy by establishing strategic cooperation in various forms of arrangements for collaboration, participation, and collectivity of resources with strategic partners such as other regional companies, other governments, community communities, Non-Governmental Organization (NGOs), private companies, and other stakeholders in supporting the value chain of the company's operations and expanding the space for its business movement. These forms of cooperative strategies are carried out while still referring to the vision, mission, strategy, policies, and values adopted by the Hygiene Regional Company, by staying in the position of being the only company that has authority in cleanliness and waste management in Pontianak City, adhering to the principle of risk sharing and balance of profits obtained, cooperation with other professional parties to develop complementary businesses, as a learning arena to develop the business in the future, and form strategic alliances with many partners to support and develop key strategies.

CONCLUSION

In an effort to establish relations with the community, Hygiene Regional Company divides it into two parts, namely internal public relations and external public relations. The internal relationship is related to people who go directly to the regional agency as well as with the local community. This is related to the role of the Public Relations Sector to be a connector for the company to inform, promote, or receive complaints that come from the community. In addition, because the governmental unit administratively enters the community area, it must be positively good and must follow the policies and regulations of the local government.

Independent leadership is leadership that has independence in compiling master plant organizations including the management of various resources. Hygiene Regional Company is a public organization that is regulated independently by law the company has independence in management even though Hygiene Regional Company is a Village Own-enterprises (Badan Usaha Milik Daerah – BUMD) of Pontianak city government. As a BUMD

Regional Company. Cleanliness in running the organization must be independent of various interventions because directly BUMD is its accountability to the public and its accountability will be audited by the Government Financial Audit Agency as an independent state auditor.

The special agency even if carries out the functions of the Pontianak City government, should not be treated like a Regional Apparatus Work Unit. This independence of leadership is aimed at developing the Hygiene Regional Company. Cleanliness through business development and resource development such as limited human resources and means resources including transportation of waste carriers.

Limitation of the study

Based on the direct experience of researchers in this research process, there are several limitations experienced and can be several factors that can be paid more attention to for future researchers. This significantly affects the operation of field observations, namely completing reading materials about the psychology of the community during the outbreak season. Thus, it will further refine the research because this research itself certainly has shortcomings that need to continue to be improved in future research.

REFERENCES

1. Bick, R., Chang, M., Wang, K. W., & Yu, T. (2020). A blueprint for remote working: lessons from China. McKinsey & Company, March(8).
2. Brainard, L. A., & McNutt, J. G. (2010). Virtual government-citizen relations: Informational, transactional, or collaborative? *Administration and Society*, 42(7), 836–858. <https://doi.org/10.1177/0095399710386308>.
3. Campbell, K. B. (2005). Theorizing the authentic: Identity, engagement, and public space. *Administration and Society*, 36(6), 688–705. <https://doi.org/10.1177/0095399704270582>
4. Creswell, J. W. (2014). *Research Design, Qualitative, Quantitative, and Mixed Methods Approaches* (4th Ed). London: Sage Publisher.
5. Debucquet, G., Guillotreau, P., Lazuech, G., Salladarré, F., & Troiville, J. (2020). Sense of belonging and commitment to a community-supported fishery. The case of Yeu Island, France. *Review of Agricultural, Food and Environmental Studies*, 101(4), 439–459. <https://doi.org/10.1007/s41130-020-00101-3>.
6. Denhardt, R. B., & Denhardt, J. V. (2000). The new public service: Serving rather than steering. *Public Administration Review*, 60(6), 549–559. <https://doi.org/10.1111/0033-3352.00117>.
7. Korti, R., & Souad, S. B. (2018). Citizen Participation and Sense of Community in the Development of the Permanent Conservation Project Plan. *European Journal of Interdisciplinary Studies*, 4(1), 87. <https://doi.org/10.26417/ejis.v4i1.p87-92>.
8. Lincoln, Y. S., & Guba, E. G. (1988). Criteria for assessing naturalistic inquiries as reports. *Annual Meeting of the American Educational Research Association*, 26. <https://doi.org/10.1158/0008-5472.CAN-06-3557>.
9. Nilles, J. M. (1988). Traffic reduction by telecommuting: A status review and selected bibliography. *Transportation Research Part A: General*, 22(4), 301–317. [https://doi.org/10.1016/0191-2607\(88\)90008-8](https://doi.org/10.1016/0191-2607(88)90008-8).
10. Pontianak, D. K. (2021). Kota Pontianak Hasilkan 1.300 Ton Sampah Setiap Harinya. Pontianak: Republika.
11. Pontianak Regional Regulation No. 9 of 2018 on Waste Management, 1 (2018).
12. Priyatna, E. (2020). Pemanfaatan Aplikasi Zoom Cloud Meetings Sebagai Media Komunikasi Ditengah Pandemi Corona (Covid-19) Utilization of Zoom Cloud Meetings Applications As a Communication Media in the Center of Corona Pandemics (Covid-19) Sebagai Media Komunikasi Ditengah (Unpublished Thesis). Universitas Pasundan, Bandung.
13. Purwaningrum, P. (2016). Upaya Mengurangi Timbulan Sampah Plastik Di Lingkungan. *Indonesian Journal of Urban and Environmental Technology*, 8(2), 141. <https://doi.org/10.25105/urbanenvirotech.v8i2.1421>.

14. Randi, A. (2020). Pengenalan Video Conference. In Aplikasi Teleconference Mendukung Work From Home (pp. 1–6). Teknologi Informasi Telkom University.
15. Sembiring, E. (2021). Urgensi Penanganan Limbah Plastik di Indonesia (pp. 1–2). Fakultas Teknik Sipil dan Lingkungan (FTSL) ITB.
16. Solihin, A. (2020). Pembelajaran Online dengan Aplikasi Zoom Meeting. *Jurnal Kehumasan*, 3(2), 17–23.
17. Vyas, L., & Butakhieo, N. (2021). The Impact of Working From Home During COVID-19 on Work and Life Domains: an Exploratory Study on Hong Kong. *Policy Design and Practice*, 4(1), 59–76. <https://doi.org/10.1080/25741292.2020.1863560>.