STRENGTHENING ICT AND GOVERNANCE TO ACHIEVE 2030 SDGS: LESSON LEARNT FROM RIDWAN KAMIL AND COMMUNITY INITIATIVE

PENGUATAN TIK DAN TATA KELOLA UNTUK MENCAPAI SDGS 2030: PEMBELAJARAN DARI RIDWAN KAMIL DAN INISIATIF MASYARAKAT

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ABSTRACT

Indonesia, as other many countries, has been making a great effort to achieve the 2030 Sustainable Development Goals (2030 SDGs). Goal 9 of the SDGs related to industry, innovation and infrastructure in which information and communication technologies are an important way to facilitate sustainable development. This is in line with the Industrial Revolution 4.0. Well established Information and Communication Technology (ICT) and governance involving local governments and civil society, Bandung City, West Java Indonesia, is one of the good examples used ICT as a tool to improve public services with the use of e-applications. Ridwan Kamil (RK) the Mayor of Bandung City in the period of 2013–2018, communicates directly through private social media account and also account initiated by a civil society, namely Ridwan Kamil Watch. Meanwhile, community initiatives arise to express their aspirations concerning the RK policies and city development planning. Data used for this paper is drawn from our research collected by using a qualitative approach and methods, such as in-depth interviews. Results of the study show that communities actively participate in the realization of smart governance in terms of planning and monitoring government programs and in obtaining services. Interactive activities through ICT, especially social media, are able to accelerate public services. Most issues are raised on this account concerning the delay in responding to public services related to the target of 2030 SDGs, namely infrastructure, environment, health and population administration. This paper will discuss some issues about how ICT is able to cut bureaucratic lines and to accelerate public services; negotiation between lovers and haters in relation to public service priorities; type of public services related to SDG's topic.

Keywords : ICT, governance, SDG's, Ridwan Kamil Watch, community initiatives

ABSTRAK

Pencapaian SDGs 2030 merupakan komitmen banyak negara, termasuk negara-negara Asia Tenggara dan Indonesia pada khususnya. Indonesia sebagaimana negara-negara Asia Tenggara lainnya telah melakukan upaya besar untuk mencapai SDGs 2030. Antara lain, Goal 9 yang terkait dengan industri, inovasi dan infrastruktur di mana teknologi informasi dan komunikasi merupakan cara penting untuk memfasilitasi pembangunan berkelanjutan. Hal ini sejalan dengan Revolusi Industri 4.0. Teknologi Informasi dan Komunikasi (TIK) yang mapan dan tata kelola yang melibatkan pemerintah daerah dan masyarakat sipil. Bandung, Jawa Barat Indonesia, merupakan salah satu contoh smart city saat Ridwan Kamil (RK) sebagai Walikota. RK, mantan Wali Kota Bandung yang memanfaatkan TIK sebagai sarana untuk meningkatkan pelayanan publik dengan pemanfaatan aplikasi elektronik. RK juga berkomunikasi langsung dengan anggota komunitasnya melalui akun media sosial yang digagas oleh masyarakat sipil (RK Watch). Kegiatan interaktif melalui TIK khususnya media sosial mampu mempercepat pelayanan publik. Sebagian besar isu yang muncul terkait dengan keterlambatan respon pelayanan publik terkait dengan target SDGs yaitu infrastruktur, lingkungan, kesehatan dan administrasi kependudukan. Artikel ini akan membahas beberapa isu tentang bagaimana TIK mampu memotong garis birokrasi dan mempercepat pelayanan publik; negosiasi antara pecinta dan pembenci dalam kaitannya dengan prioritas pelayanan publik; jenis layanan publik yang terkait dengan topik SDGs. Data yang digunakan untuk tulisan ini diambil dari penelitian kami yang dikumpulkan dengan menggunakan serangkaian pendekatan dan metode kualitatif seperti wawancara mendalam dan diskusi kelompok terfokus.

Kata Kunci: TIK, Pemerintahan. SDG's. Ridwan Kamil Watch, Inisiatif Masyarakat

INTRODUCTION

The Industrial Revolution 4.0 era (IR 4.0) has became an inevitability. The government of Indonesia has continued preparing to enter this era. Indonesia has signed the convention of the World Summit on Information Society (WSIS). Among others, one of the contents of the convention is that in 2015 half of the world population will be connected to the internet. Data of the *Asosiasi Penyelenggara Jasa Internet Indonesia* (Internet service provider association) or APJII shows that in 2022, the internet users in Indonesia were 210 million people. Meaning that approximately 80 percent of the total Indonesian population has been connected to the internet (dataindonesia.id). This shows that Indonesia has highly committed been implementing the WSIS's convention. In a meeting in Geneva in 2016, one of the important outcomes of WSIS Forum was that "WSIS Action Lines Supporting Implementation of the Sustainable Development Goals"/ WSIS Action Lines / Sustainable Development Goals Matrix – WSIS Forum 2016 Outcomes. In the tenth anniversary World Summit on Information Society (WSIS) Forum held in Geneva on the 8th – 12th April 2019 discussed a theme on "Information and Communication Technology for achieving Sustainable Development Goals (SDGs). This shows the close relationship between the progress of ICT and the target achievement of SDGs.

In order to Achieve WSIS agenda, Bandung City is one of the smart cities in Indonesia develop ICT infrastructure for development, increased access of knowledge, capacity building and application of e–government. E-government is one of the Bandung City government programs that has been running since the 3.0 era to sustain the running of smart cities. E-government is the implementation of smart governance: the use of ICT in the activities of government organizations while the smart city widens the scope for people to be smart, smart environmentally, and also smart branding, smart economy, smart living as well as smart mobility as stated in the smart city wheel (Cohen, 2013). Smart governance is only done by the government, while a smart city is by the whole community. One of the objectives of an intelligent city is improving the quality of life of its citizens through transparency of government policy. As Lara (2016:) also stated, innovation is an integral part of the concept of smart cities. In developing smart cities, technology, policy, and the community are important to build blocks or drivers of these cities (Nam and Pardo, 2011 cited in Yigitcanlar, 2021).

In running the smart governance, the city of Bandung has 216 applications and platforms (http://data.bandung.go.id). Several applications related to participation are available for planning, service and monitoring. Through the platform and applications, there is expected interactivity between government and residents stranded. One application of planning is e-musrenbang[1]. The presence of applications and platforms in governance of the Bandung City has increased in promoting citizen participation in development. It is therefore important issue since participation is the main aspect in a smart city. Smart governance applied in e-government is a form of relationship between government and society that produces transparency and accountability. In the city of Bandung, the relationship between the government and the community is not only done through the official application and platform of the city of Bandung. The mayor of Bandung, Ridwan Kamil (RK), is a figure who is expert at using social media and also at communicating with his community, especially the millennial generation. RK often socializes his programs through Instagram and Twitter and monitors feedback from the public. As city members, communities actively participate in the realization of smart governance in terms of planning and monitoring government programs and in obtaining services. One of the communities that runs the function of policy analysis and monitoring is the Ridwan Kamil Watch.

The combination of infrastructure, smart government and smart citizens is expected to strengthen the development agenda that is aspired to improve the benefit of the world's population as stated in the 2030 SDGs. Through e-government

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1   *Musrenbang (musyawarah perencanaan pembangunan) :* forum to provide opportunity for the community to be participate in policy making process

applications, all levels of society can access information and can be involved in the decision-making process related to the 17 objectives of the SDGs. One application that can facilitate decision making is budget planning related to basic services, especially education and health, which can be done through e-musrenbang (Hege and Brimond, 2018). So far, NGOs have been very instrumental in encouraging the achievement of the 2030 SDGs. Hege and Brimond, further gave an example of what happened in Sweden where civil society organizations were invited to participate in the budget debate in the parliament. In Bandung, a program that related to health services is Layad Rawat and another program of social assistance called Sabilulungan.

In the IR 4.0 era, civil society could do a review of budgeting without any invitation of the parliament. ICT facilitation allows civil society to debate virtually. This is done by civil society members of the Facebook community, Ridwan Kamil Watch, who conduct analysis and monitoring of the budget. This allows all people, including ordinary people, to get access in expressing their aspirations related to the needs for development in their area. This condition would not have happened in the past because only special invitees, in particular local bureaucrats, religious and community leaders attended to the *musrenbang.* So, this era is more accessible for everyone who is the population of a given city or district to be involved in participatory policy decision-making process. This is in line with the principle of SDGs, that is 'no one left behind'.

PROBLEM STATEMENTS, RESEARCH QUESTIONS AND OBJECTIVES

The IR 4.0 era opens an opportunity for everyone to participate in any policy-making process using the available digital technology. With the use of advanced technology to give wider opportunities for expressing their aspirations, it can be predicted that not all people will get the benefit of it. However, there will be a group of people who may not be able to access the technology, which is called the digital divide, including women, old people, the poor. The questions that arise are how

the government addresses this problem and how the government interacts with the people in its administrative boundaries. Could you accept the proposed policy/program? The importance of this paper lies in the fact that to achieve the target of 2030 SDGs the government should facilitate its people to get involved through the use of ICT. Therefore, it is important to know how to achieve the target of SDGs in the 4.0 Era, especially when the link between the ICT and the achievement of SDGs has already been highlighted by the WSIS forum in 2016. Therefore, it is important to discuss how the achievement of the SDGs target can be accelerated by strengthening the ICT and its governance. In this case, the Bandung City Government apply the use of technology to provide an opportunity for people, because the use of technology eases people to be involved in the decision-making process made by the government, so that the government leaves no one behind. However, the use of advanced technology needs special skills and infrastructure required. Therefore, the policy of using technology can be challenged by the ability of people to use the internet in accessing the local government policy/program.

The paper is aimed at discussing the interaction between the City Government, the Mayor of Bandung, and the smart people who are Ridwan Kamil's Instagram and Twitter followers as well as members of Ridwan Kamil Watch, carry out the decision-making process, disseminating the program, analyzing and evaluating an online government program to achieve the target of 2030 SDGs.

LITERATURE REVIEW AND THEORETICAL FRAMEWORK

The Sustainable Development Goals (SDGs), also known as the Global Goals, were adopted by all United Nations Member States in 2015 as a universal call to action to end poverty, protect the planet and ensure that all people enjoy peace and prosperity by 2030 (https://sdgs.un.org/goals). SDGs have 17 integrative programs or goals. SDGs that link one another with each outcome will be related to another so that socio-economic and environmental development in a sustainable

way. To achieve the target of the SDGs, countries who signed the convention have committed that they have to implement related programs for all people in the country and 'no one is left behind'. By doing so, it is expected that in 2030 there will not be anyone who is in poverty, hungry and free from any form of discrimination and violence.

In line with the target of SDGs, Indonesia continues making efforts to achieve the target and has a motto of "Change Our World: Agenda for 2030 SDGs". As the other countries are concerned with making and implementing the program, Indonesia encourages people to actively participate in the related programs. The formulation of the program has also been developed by including all actors of development, such as the government, Civil Society Organization (CSO), the private sector, academia and others. The target of SDGs has to be achieved not only by the central government but also by government at all levels.

According to the SDGs Center (https://sdgs.bappenas.go.id/sekilas-sdgs) there are four pillars in SDGs, namely social development pillar, environmental development pillar, economic development pillar, and governance and law development pillar. 1) The social development pillar focuses on the fulfillment of human basic needs and rights that are high quality, in justice, and equal in order to improve the well-being of the population. 2) The environmental development pillar focuses on the achievement of a sustainable environment and natural resources management 3) The economic development pillar focuses on the achievement of high-quality economic growth through sustainable job opportunities and entrepreneur, innovation, inclusive industry, adequate infrastructure, clean and affordable energy and supported the relevant partnership. 4) The governance and law development pillar focus on the realization of legal certainty and effective, transparent, accountable, and participatory governance to create security stability and achieve a state based on law. Sustainable development goals are designed to be participatory.

In order to achieve the target goals, it is not only the government's responsibility, but also the Civil Society Organizations (CSOs), the private sector, academics, communities, and the media.

This is in line with the one important thing in the SDGs' key principle of 'Leave No One Behind'. Not Leaving One Person is a key principle of the SDGs. With these principles, SDGs must at least be able to answer two things, procedural justice, namely the extent to which all parties, especially those who have been left behind, can be involved in the entire development process, and substantive justice, namely the extent to which development policies and programs can or are able to answer the problems of citizens, especially the marginalized groups (https://sdgs.bappenas.go.id/sekilas-sdgs) . The spirit of inclusive development is the commitment of the country concerned.

The context of SDGs in the Industrial Revolution 4.0 era cannot be separated from the government as the service provider side. The most basic aspect of this era is the level of ICT infrastructure availability. Therefore, building a durable infrastructure supports inclusive and sustainable industrialization and fosters innovation. One target stated in goal 9 is that 'Significantly increase access to information and communication technology and strive to provide universal and affordable access to the internet in less developed countries by 2020'. Therefore, it is important to relate SDGs in the context of IR 4.0 especially when it focuses on Smart Cities.

The smart city is a concept that has been developed since the 2000s. This concept includes the development of urban areas which are integrated with the development of ICT. The use of ICT makes governance efficient and thus improves public services. The implication of improving public services is that the quality of life of people increases and the economy develops in a sustainable manner. To achieve this, Cohen developed 6 dimensions of the smart city called the smart cities wheel, consisting of:

1. Smart Governance: Enabling supply and demand side policies, transparency and open data, ICT, and e-government
2. Smart Living: Healthy, Safe, Culturally Vibrant, and Happy
3. Smart Mobility: Integrated ICT, Prioritized clean and non-motorized options, Mixed-modal access

4. Smart People: Embrace creativity, Inclusive society, 21st Century Education
5. Smart Economy: Entrepreneurship and innovation, Productivity, Local and Global - Interconnectedness
6. Smart Environment: Green Buildings, Green Energy, Green Urban Planning

Sumber: Cohen (2013)

Gambar 1. The Smart City Wheel Chart

The position as a data provider can be seen from how smart the city government is in governance. The most basic thing in seeing a most basic aspect of the quality of governance is seeing how public services are delivered through e-government. This is how e-government uses ICT in government organizations in relation to both internal and external organizations, in order to provide services to government institutions, businesses, and society. The relationship is as follows:

1. Government to government (G to G): exchange of information between a central or central government with local governments.
2. Government to Business (G to B): relations with businesses.
3. Government to Citizen (G to C): relations with the community.
4. Government to Employee (G to E): relations with employees. (Indrajit, 2002 cited by Buchari, 2016)

E-government provides many benefits both in terms of service providers and service recipients. These benefits are a) efficiency in terms of financing; b) promotion of fair competition for a positive business climate because competition is fair; c) transparency and accountability in the decision-making process; d) improvement of services; e) information as a means of

empowerment for open access to information (Dash and Pani 2016 cited by Elysia, Wihadanto and Sumartono , 2017).

Public service can be well adapted if the recipient of public service is a smart community. Therefore, it is crucial for citizens to actively participate in the decision-making process in designing programs, especially budgeting. After the program runs, analysis and monitoring are required. In the 4.0 era, this can be done through e- participation, used for analysis. E-participation can be done if an application or platform is available that allows citizens to participate online. A smart city is a city that listens to and meets the needs of its citizens (Macintosh, 2004 in Vrabie and Tirziu, 2016).

The implementation of a Smart City is in line with some goals of the Sustainable development goals (SDGs). Indonesia is one of the countries that ratified the convention to achieve the SDGs by 2030s as declared on the 25th September 2015, at the same time as the event of the United Nations General Assembly (UNGA) at the UN Office, New York, United States of America. The SDGs consist of 17 goals and 169 targets.

However, establishing smart cities should not depend solely on innovation alone and it is not the sole ingredient of success in establishing smart cities (Gaffney and Robertson 2016; Yigitcanlar 2016 cited in Lara, et.al, 2016). Lara highlights that, despite the fact that technology has played an important role in the development of smart cities, people are at the center of the debate. In developing smart cities, it has to start with the premise of integrating people's aspirations and needs so that this will result in a positive impact on people's daily lives. In this case, Lara noted that people are not only the customers of the product but also the creators of which the product was produced.

METHODOLOGY

The data used for this paper is mainly taken from the study conducted in Bandung City in April 2018 with the use of a qualitative approach. Primary data is drawn from in-depth interviews with several key informants, including Ridwan

Kamil followers, Ridwan Kamil watch admin, and the co-founder. The selection of key informants uses snowball methods in which researchers identify potential informants based on the reference given by the previous informants. In addition, the study also used secondary data taken from the application and platform related to e-government and personal accounts of Bandung Ridwan Kamil.

FINDING AND DISCUSSION

Bandung City Government As a Service Provider

Bandung city is one of the metropolitan cities in Indonesia which is administratively under the West Java Province. Data from the Local Bureau of Statistics show that in 2017 the total number of populations in the city was 2.497.938 people (bandungkota.bps.go.id). Since being elected as mayor in 2013, Ridwan Kamil began building ICT infrastructure as a basis for developing smart cities, including expanding broadband services and installing 10,000 free WIFI access points in various public areas. The development of ICT infrastructure in the city of Bandung is the foundation of creating an information society. This is in line with WSIS Action Line C2. Infrastructure development is expected to help achieve the SDGs goals 1, 8, 9, and 11 (see appendix 1 & 2).

ICT development in Bandung City is conducted to prepare for the Bandung Smart City program. Bandung City has a population of 40 years of age and under about 60 percent of the total population. The city also has 80 colleges and universities that form the capital for building Bandung smart city. The construction was carried out through 3 stages, namely: 1) Smart City 1.0: digitization, 2) Smart City 2.0: the development of a more interactive and 2-way system, for example, system complaints, permits, and 3) Smart City 3.0: development of a machine to a machine communication system (Tempo, 2017).

Development of a smart city that is based on machine-to-machine communication in line with the demands of the industrial revolution 4.0. Smart city development involving the

government, people and all stakeholders used in the development needs is in line with WSIS Action Line C2. This is expected to have an impact on achieving SDGs goals 1, 3, 5, 10, 16, and 17 (see appendix 1 & 2).

To improve its public services, the Bandung City Government developed an information-technology-based service system. The purpose of developing this system is to create smart governance. In 2018, the city of Bandung has 216 service applications that have operational status (http://data.bandung.go.id/dataset). Based on the assessment of some applications that are operated by a city working unit (Satuan Kerja Perangkat Daerah/SKPD) in the city of Bandung, the following:

1. Government to government (G to G): exchange of information between government institutions, (bandung.go.id)

2. Government to Business: through an online system, civil servants' performance can be monitored, thus their productivity will be easily assessed by the city government. https://dpmptsp.bandung.go.id/izin/. This site is the embodiment of a smart economy, where the city of Bandung can increase opportunity, productivity, and local and global interconnectedness.

3. Government to Citizen: E-Musrenbang, is an application and social media forum for smart people to channel their aspirations. https://id id.facebook.com/pages/category/Community/E-Musrenbang-Kota-Bandung-. 1748724562123245 /. The website sabilulungan.bandung.go.id is the application for social assistance applicants. Through this application, the social assistance process can be monitored by public concern. Layad Rawat dinkes. bandung.go.id is a form of smart living that needs to assist people with health support.

4. Government to Employee: system performance remuneration information: kinerja.bandung.go.id

From some of these applications, there are several applications that have played important roles in achieving the goal of 2030 SDGs. These applications are:

1. Formal Forum for Development Planning Process: *E-Musrenbang*

   E-Musrenbang is the formal forum to discuss the development planning proposed by the government to facilitate the active participation of citizens in the decision-making process. The program comes with the publication of Law No. 25 of 2004 on the National Development Planning System. The *Musrenbang* is used to develop a strategic plan (5 years) and an annual development plan. Village (*desa)* is the bottom government unit to implement the *musrenbang.* Meanwhile, data on development planning which is the result of deliberation at the local level serve as the basis for formulating the Village Development Plan (Djohani, 2008).

   In 2017, the Government of Bandung City launched an *e-musrenbang*. The results of the citizens' deliberations are included in the application (Akbar, 2018). Data entry is carried out at the level of neighborhood groups. Then, the data is verified at the village level, whereas validation is done at the district level. When the data is ready, it is then submitted to the city level. *E-musrenbang* is usually integrated with e- budgeting (Akbar, 2018). In the city of Bandung, the *e-musrenbang* application is connected to the "Bandung Command Center". *E -musrenbang* is assumed to be better than the conventional *musrenbang* because it can reduce face-to-face meetings. The previous *musrenbang* was only attended by the local elite and a segment of people such as women, the old, and the poor were usually not invited to the local *musrenbang.* Apart from this, the attendees sometimes cannot express their criticism directly if there is any dispute. Meanwhile, in the e - *musrenbang,* participation of marginalized groups such as women and poor groups is expected to increase. Programs that are in line with WSIS Action Line C2 (capacity building). Through capacity building, it is expected we can accelerate the achievement of SDGs goals 1,2,3,4,5,6,12,13,14,16,17 (see appendix 3).

2. Health Services: Dinkes.bandung.go.id and (@ LayadRawat119

   The City Government of Bandung has a service called Layad Rawat, which is a health service for those whose services are provided at the resident's homes. This facility is given to residents who have difficulty reaching health facilities such as hospitals or Puskemas (community health centers). Constraints reaching the health facilities are generally factors related to the geographic condition despite the economic factor. Layad Rawad, is an innovative program that was inaugurated by the Mayor of Bandung on July 26, 2017. This program is in line with WSIS Action line C7.iv (ICT application in e-health), which was expected to accelerate the achievement of SDGs goals 1, 2, 3, 5.17 (see appendix 1&2).

   Information about Layad Rawat can be seen through the Bandung Health Office website or via Twitter (@ LayadRawat119. From the available information (@ LayadRawat119 for each month almost 2000 incoming calls to 119. The Layad Rawat care services can be categorized into 2:

   • Planned visits: it is a basic visit for patients who require regular visits (the data of the patients derived from the community health center).

   • Unplanned visits are a service based on the request of citizens (AyoBandung. Com, 2019). Although information about Layad Rawat can be obtained through the website or Twitter platform, getting services can be done through the call center.

3. Social Assistance : https://sabilulungan. bandung.go.id

   Sabilungan is a grant aid or social assistance that community members need to reduce their poverty. This program is in line with SDGs goal number 1, to eradicate poverty. However, because this social assistance is given by the government of Bandung City in the form of cash, it might be prone to corruption. This is indicated by the

case of the former mayor and the district secretary, Ridwan Kamil, who became a suspect in social assistance bribery (Detik News, December 23, 2013). In preventing the re-occurrence of this case, Ridwan Kamil created the sabilulungan.bandung. go.id site. Through this site, the donation process can be monitored transparently. This social assistance is used for community empowerment in the fields of education, health, the construction of worship places, etc. This program is a manifestation of the Government-Citizen WSIS Action Line C7i (e-government) interaction and is expected to strengthen the achievement of SDGs goals 9, 16, and 17 (see appendix 1&2).

4. Informal Forum for Development Planning Process: @ridwankamil and Ridwan Kamil Watch

Ridwan Kamil was the Mayor of Bandung in 2013-2018. He is an expert at using social media to communicate with his community. Ridwan Kamil created an Instagram that has followers of around 11.1 million. He also has a Twitter @ridwankamil that has about 3.8 million followers. He has a dialogue with citizens often through his Insta Stories or life on Instagram. In addition, social media are also used to socialize with various government programs.

Due to the high number of his followers, the socialization of his proposed program was successful as it was supported by his huge number of followers. The followers of Ridwan Kamil's Instagram are generally his 'lovers'. Having a modern and innovative city style, Ridwan Kamil is considered populist by the millennial age group. Therefore, many millennial generations become his followers. Sentences that are used for socialization in his programs targeted at the millennial generation are usually in the form of very popular phrases. For example: *Buanglah mantan pada tempatnya. Buanglah sampah pada temannya. Selamat malam.* "Dispose ex boy/girl frend in its place, throw the garbage on her/his friends. Good night" (@ridwankamil, 12 January 2014). When

socializing with Ridwan Kamil's health program, he used the following formal sentences:

"Residents of Bandung, contact 119 for LAYAD RAWAT services. This is the services of doctors and health workers who come to people's homes.

Only for lower middle-class citizens. He uses a philosophy "Humanizing of humans ". (Ridwan Kamil's Facebook, December 10, 2017)

The similar word is used to socialize social assistance programs:

" Sabilulungan.bandung.go.id, the embodiment of a corruption-free government with transparency in the mechanism of grants and social assistance.

With this website, the distribution of funds can be more easily and clearly accounted for. Technology is used for the common good.

Please share to support the socialization of online social assistance". (Ridwan Kamil's Facebook, December 25, 2013)

Despite the benefit of using social media in socializing his programs, however, there are also weaknesses that emerge due to the use of mixed functions of social media in terms of using the account, Ridwan Kamil as the Mayor of Bandung and Ridwan Kamil as an ordinary person who has an account for the media to communicate with others.

He used social media as the Mayor of Bandung to disseminate his proposed programs in order to gain input or feedback. However, he also posted his personal activities, such as selfie photos of his immediate family. On his social media, he often called his wife 'love', or showed intimate photos with his wife. To some netters, it does not really matter what Ridwan Kamil was posting. On the contrary, some other netters do not agree with Ridwan Kamil to use of the same social media account to post personal activities and formal usage for disseminating programs proposed by RK as a mayor. This also happened when RK criticized the community. The criticism was conveyed by Ridwan Kamil as mayor or as a member of the community.

Ridwan Kamil Watch is a Facebook community whose members are closed. There

were about 15,000 people. One of the requirements to become a member of this community is being a citizen of Bandung and he/she must be approved by the Facebook community administrator. The Ridwan Kamil Watch was founded in 2013, shortly after Ridwan Kamil was appointed as the Mayor of Bandung. The aim of the group was to oversee the development of the city of Bandung and the performance of Ridwan Kamil. The founder of this group thought that Ridwan Kamil had the potential to have a higher political career than his current position as a mayor during the study that was conducted in 2018. This assumption was proven at the time of this research that Ridwan Kamil was running for the position of governor of West Java (Ridwan Kamil is now the Governor of West Java). Ridwan Kamil Watch became bigger than at the time it was established after Ridwan Kamil, at his own request, became a member of the group in 2014. Because Ridwan Kamil has many followers, some of his followers are interested in becoming Ridwan Kamil Watch members. It could be said Ridwan Kamil is an endorser of this group. By the end of 2018, Ridwan Kamil will have been appointed as the governor of West Java Province (interview, April 2018).

This Ridwan Kamil Watch function as a watchdog, therefore its interactive activities are very high. Discussions among members of the groups are very dynamic. Meanwhile, in order to defend himself from 'haters' about his policies, Ridwan Kamil answered the questions very well and by showing adequate data. Sometimes he defended the 'haters' but other times he diverted the issues. The purpose of establishing this group was actually as a watchdog to evaluate his programs so that the leadership of RK would be successful in leading the city of Bandung. Ridwan Kamil's political promise was one of the most discussed issues. Because its contents were assumed to be very critical of his policy, Ridwan Kamil Watch members are also considered as 'haters'. The most valuable discussion was around the problem of traffic jams, flooding, and the arrangement of street vendors. The issues of health, education, and social assistance are also often discussed. For programs that work well, netters sometimes appreciate them. For programs

that are considered good, such as education and health issues (interview, April 2018).

The issue of education, especially one that was especially criticized by the Watch, was the admission of new students into state schools. In 2015 Ridwan Kamil issued its policy that every student has a certificate stating that if she/he is poor, she/he cannot be denied to be a student in a public school, and his/her national test scores should not be considered. The practice of this policy is misused by a certain group of people to pretend to be poor people by asking for a certificate of being poor from the neighborhood administrators. In some cases, well-off families got the certificate by bribing the administrators. Consequently, many prospective students cannot enter a qualified public school. Finally, this policy was revised by increasing the class capacity so that the school could accept students who passed the school passing grade. As a result of this policy, the number of students exceeded the capacity and the learning process was less than optimal. Actually, Ridwan Kamil's intention to help poor groups to enter state schools is very good. Unfortunately, this policy is misused by the community (interview, April 2018).

DISCUSSION AND CONCLUSION

The use of ICT in the context of applying Smart Cities for providing Implementation of ICT in relation to the achievement of the 2030 SDGs, specifically on Goal 9 has some problems. Among others, they include Problems of Community and System Readiness, Problem of Interactivity, Problem of Generation, Problem of Generation, and Problem of Democracy in the 4.0 era: Haters Vs Lovers.

Problems of Community and System Readiness

In terms of technology adoption, the community of Bandung City is quite ready because it is an urban area that has adequate infrastructure. As a student city and its inhabitants are known as creative people, Bandung was also declared a cyber city (jabarprov.go.id, 2013). In 2015, Ridwan Kamil, as the mayor of Bandung

City, planned his administrative territory as Silicon Valley (CNN, 2015). The improvement of ICT infrastructure and the availability of systems (e-government) is not always directly proportional to e-participation. The initial assumption that smart governance provides space for all levels of society, including marginalized people, to actively participate in programs and budget planning and monitoring is not always true. People do not have a substantial ability to analyse programs and budgets that are involved in the planning and monitoring program that was carried out by NGOs. Other problems can be seen from the system side. Many applications are not ready and the system is fragmented. For example, e-budgeting is separate from e-planning. An informant said: "from the point of view of governance, such an initiative would be wasteful. And not necessarily in accordance with community needs. Because the initiative arises more from the government, not digging from the bottom". Even then, the informants acknowledged that several systems were very positive, including online licensing.

If the City Government of Bandung wants to achieve the target of 2030 SDGs, the community should be empowered by their ability in using the technology as well as the system needed. What has been done by Bandung City Government and the community initiative @ridwankamil and Ridwan Kamil Watch are good pioneers in trying to achieve the target of SDGs, especially through the improvement of IT infrastructures and systems. However, it should be sustainable, improved, and user-friendly so everyone can use it.

Problem of Interactivity

E - musrenbang is a good system. However, there are some disadvantages. An informant said that although the *musrenbang* was conducted online, there should still be a face-to-face meeting at the neighborhood and village levels. [A1] He said that a face-to-face meeting enables them to have interactive dialogues, identify feelings as well as express their feelings directly. In addition, the results of the meeting should be uploaded to the e- musrenbang application. This was intended to

give a chance for the public to be able to track which proposals were deleted and which ones were accepted. Apparently, there was no offline or online activity because the community could only do tracking. Interactivity offline also decreased. E- musrenbang put forward transparency but less attention to the importance of interactivity, even -sometimes face-to-face meetings. Even if there was a consensus derived from a face-to-face meeting, the nature of the meeting was a formality because community members just uploaded the proposal. Research conducted by the Initiative Association showed that in some cases, attention or community enthusiasm for *musrenbang* was decreasing, although, on the positive side, transparency increased (interview 24 April 2018). The informant explained that this system could be developed to complement the existing Internet features. It could also integrate the system with social media so that interactivity and transparency can be done simultaneously. If the existing features can be improved and the interactivity increases, the strategic plan of development can be well formulated. This contributes to the effort to achieve the target of SDGs. This will not leave anyone behind in the participatory policy-making process.

Problem of Generation

The involvement of civil society as the government partner in organizing e-governance is still mostly done by the X generation and part of the small Y generation, who are generally Non-Government Organization (NGO) activists. The method of advocacy has been changed, but the activists remain the same. The way old-era activists advocated for the government tended to go down to the community and did community empowerment. In some cases, the old-era activists did a protest on the street. On the contrary, in the 4.0 era, the pattern of activism changed to digital activism. In this era, the Y and Z generations are very good at playing digital media, especially social media. Unfortunately, these generations rarely do the activity of expressing their aspiration through social media. Several people in the Y and Z generations have started to express their interest in activists, even

though it is not about political or budgeting problems. The Y generation has its own pattern of activism, such as making an application to encourage small and medium enterprises (SMEs). Ordinary people are also less interested in macro issues. The discourse of long-term planning has always been in existence but the response has been very inadequate. Realizing this problem, the old-generation activists want to bridge the gap with the Y-generation. However, they have not found a proper solution. Encouragement of the Y and Z generations to be aware of expressing their aspiration for sustainable development is needed.

Problem of Democracy in the 4.0 era: Haters Vs Lovers

The 4.0 Era is an open opportunity to promote transparency and accountability. But the question of democracy must still be questioned. In the case of Bandung, the followers of Ridwan Kamil, who were mostly lovers always defended Ridwan Kamil's policies. It was hard for lovers to accept the criticism directed at Ridwan Kamil. When there were netters who criticized the policy of Ridwan Kamil would be regarded as haters and would be bullied. The number of followers can be used as a political power figure. Ridwan Kamil was confident because of his huge big followers. The expertise of Ridwan Kamil in playing social media sometimes weakens the position of the community. This can be seen when the netters who criticized are bullied by lovers, unfortunately, Ridwan Kamil did not respond to it. However, the IR 4.0 has offered a broad opportunity for community members to participate in the development planning process. Members of Bandung City, especially the millennial generation, seem to take advantage of using digital technology to express their aspirations, a condition that has rarely been done before. People were enthusiastic about joining the public debate concerning the existing policies as well as the development planning.

The lovers should differentiate between constructive and destructive critics. This is because the aim of critics of the policy is to improve the policy itself. The use of data to criticize was not used to attack people personally.

As netters, they feel that they have the right to criticize the programs. Destructive criticism is generally done without presenting adequate data and it is often associated with the weaknesses of the characters being criticized. According to the informant, letting lovers criticize can be interpreted as undermining millennial contributions in criticizing the policy. According to informants, the millennial generation should be far more critical because they live in the era of cyberspace. Unfortunately, sometimes millennials persecute people who are the critics. The lovers would seek the identity of the people who made the critics by googling and, after knowing his/ her identity, then the actor would be persecuted by Ridwan Kamil lovers. In the context of the democratic era, delivering criticism or delivering arguments is a common activity.

The 4.0 Era provides an opportunity to use social media as a channel to express political aspirations in a proper way. If the netters could be used wisely, the 4.0 Era would give a wider opportunity to accelerate the achievement of SDGs targets. Community members can express their freedom of aspirations without any fear of being stigmatized as the opposition. The existence of technology allows community members to participate in the process of development planning in any situation and any place.

CLOSING REMARK

Indonesia has been making great efforts to achieve the 2030 SDGs targets by maximizing the use of the available ICT. The combination of automation technology and cyber technology is expected to improve the service of public needs. With the use of ICT technology, anyone in the community can actively participate in development planning. This gives room for a person to express his/ her ideas freely without having any barrier to attendance at a specified meeting. Meanwhile, the online meeting is also effective and efficient as the local government does not need to provide, a special budget for the meetings. However, it is not enough as there was no clear identification of whether the person in charge was really a member of the community involved. In addition, participation in the meeting

dialogue can get a response directly if, in any case, they have an idea or questions arise.

As the mayor of Bandung City, Ridwan Kamil helped the Indonesian Government in achieving the target of SDGs. Ridwan Kamil has tried to make a breakthrough in increasing community participation in the policy-making process by providing wider access to the internet for expressing people's aspirations. In the past, a development planning forum called *musrenbang* was usually face-to-face meetings. Ridwan Kamil has been successful in mobilizing resources to support his ideas through the use of social media (@ridwankamil Tweeter and Ridwan Kamil watch. He has a huge number of followers and they became his 'lovers', who continuously support his proposed policy/program. Even so, he also faces many 'hatters' who oppose or criticize his ideas[A1]. There are four problems that he needs to solve. Namely, problems of community and system readiness, the problem of interactivity, the problem of generation, and the problem of democracy. If the problem can be solved adequately together with the sustainable improvement of ICT infrastructure and system, it can be expected that the effort will contribute to the acceleration in achieving the 2030 SDGs target. The study confirmed the theory stated by Prado (2016) that smart cities could have been successful if they also involved the community and technology in the development planning process and could include all the people in the community concerned.

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Appendix 1

SDGs (With sub-goals) and WSIS Action Lines Matrix

Sustainable Development Goal (Please press ctrl+click to see SGDs)	Relevant WSIS Action Line (Please press ctrl+click to see rationale)
Goal 1. End poverty in all its forms everywhere (1.4, 1.5, 1.b)	C1, C2, C3, C4, C5, C7 e-business, C7 e- health, C7 e-agriculture, C7 e-science, C10
Goal 2. End hunger, achieve food security and improved nutrition and promote sustainable agriculture (2.3, 2.4, 2.5, 2.a)	C3, C4, C6, C7 e-business, C7 e-health, C7 e-agriculture, C8, C10
Goal 3. Ensure healthy lives and promote well-being for all at all ages (3.3, 3.7, 3.8, 3.b, 3.d)	C1, C3, C4, C7 e-health, C7 e-agriculture, C10
Goal 4. Ensure inclusive and equitable quality education and promote lifelong learning opportunities for all (4.1, 4.3, 4.4, 4.5, 4.7)	C3, C4, C5, C6, C7 e-learning, C7 e- employment, C7 e-agriculture, C7 e-science, C8, C10
Goal 5. Achieve gender equality and empower all women and girls (5.5, 5.6, 5.b)	C1, C3, C4, C5, C6, C7 e-business, C7 e- health, C7 e-agriculture, C9, C10
Goal 6. Ensure availability and sustainable management of water and sanitation for all (6.a, 6.b)	C3, C4, C7 e-science, C8
Goal 7. Ensure access to affordable, reliable, sustainable and modern energy for all (7.1, 7.a, 7.b)	C3, C5, C7 e-science
Goal 8. Promote sustained, inclusive and sustainable economic growth, full and productive employment and decent work for all (8.1, 8.2, 8.3, 8.5, 8.9, 8.10)	C2, C3, C5, C6, C7 e-business, C7 e- employment, C7 e-agriculture, C8, C10
Goal 9. Build resilient infrastructure, promote inclusive and sustainable industrialization and foster innovation (9.1, 9.3, 9.4, 9.a, 9.c)	C2, C3, C5, C6, C7 e-government, C7 e-business, C7 e-environment, C7 e- agriculture, C9, C10
Goal 10. Reduce inequality within and among countries (10.2, 10.3, 10.c)	C1, C3, C6, C7 e-employment, C10
Goal 11. Make cities and human settlements inclusive, safe, resilient and sustainable (11.3, 11.4, 11.5, 11.6, 11.b)	C2, C3, C5, C6, C7 e-environment, C8, C10
Goal 12. Ensure sustainable consumption and production patterns (12.6, 12.7, 12.8, 12.a, 12.b)	C3, C4, C7 e-employment, C7 e-agriculture, C8, C9, C10
Goal 13. Take urgent action to combat climate change and its impacts (13.1, 13.2, 13.3, 13.b)	C3, C4, C7 e-environment, C7 e-agriculture, C7 e-science, C10
Goal 14. Conserve and sustainably use the oceans, seas and marine resources for sustainable development (14.a)	C3, C4, C7 e-environment, C7 e-science
Goal 15. Protect, restore and promote sustainable use of terrestrial ecosystems, sustainably manage forests, combat desertification, and halt and reverse land degradation and halt biodiversity loss	C3, C7 e-environment, C7 e-science
Goal 16. Promote peaceful and inclusive societies for sustainable development, provide access to justice for all and build effective, accountable and inclusive institutions at all levels (16.2, 16.3, 16.5, 16.6, 16.7, 16.10, 16.a, 16.b)	C1, C3, C4, C5, C6, C7 e-government, C9, C10
Goal 17. Strengthen the means of implementation and revitalize the global partnership for sustainable development (17.6, 17.8, 17.9, 17.11, 17.14, 17.16, 17.17, 17.18, 17.19)	C1, C3, C4, C5, C6, C7 e-government, C7 e-business, C7 e-health, C7 e-employment, C7 e-agriculture, C7 e-science, C10, C11

Appendix 2

WSIS Action Lines	SDGs
C1: The role of governments and all stakeholders in the promotion of ICTs for development	Goal 1, 3.8, 3.d, Goal 5, 10.c, 16.5, 16.6, 16.10, 17.18
C2: Information and communication infrastructure: an essential foundation for the Information Society	1.4, 8.2, 9.1, 9.a, 9.c, 11.5, 11.b
C3: Access to information knowledge	Goal 1, Goal 2, Goal 3, Goal 4, Goal 5, Goal 6, Goal 7, Goal 8, Goal 9, Goal 10, Goal 11, Goal 12, Goal 13, Goal 14, Goal 15, Goal 16, Goal 17
C4: Capacity building	1.b, 2., 3.7, 3.b, 3.d, 4.4, 4.7, 5.5, 5.b, 6.a, 12.7, 12.8, 12.a, 12.b, 13.2, 13.3, 13.b, 14.a, 16.a, 17.9, 17.18
C5: Building confidence and security in the use of ICTs	1.4, 4.1, 4.3, **4.5**, 5.b, 7.1, 7.a, 7.b, 8.1, 9.1, 9.c, 11.3, 11.b, 16.2, 17.8
C6: Enabling environment	2.a, 4.4, 5.b, 8.2, 8.3, 9.1, 9.c, 10.3, 11.3, 11.b, 16.3, 16.6, 16.7, 16.10, 16.b, 17.6, 17.14, 17.16
C7 ICT Applications: i. e-government	9.c, 16.6, 16.7, 16.10, 17.8
C7 ICT Applications: ii. e-business	1.4, 2.3,5.b, 8.3, 8.9, 8.10, 9.3, 17.11
C7 ICT Applications: iii. e-learning	Goal 4
C7 ICT Applications: iv. e-health	1.3, 1.4, 1.5, 2.1,2.2,Goal 3, 3.3, 3.8, 5.6, 5.b, 17.8, 17.19
C7 ICT Applications: v. e-employment	**4.5**, 8.5, 10.2, 12.6, 17.9
C7 ICT Applications: vi. e-environment	9.4, 11.6, 11.b, 13.1, 13.3, 13.b, Goal 14, Goal 15
C7 ICT Applications: vii. e-agriculture	1.5, 2.3,2.4,2.a, 3.d, Goal 4, 5.5, 8.2, 9.1, 9.c, 12.8, 13.1, 13.3, 17.16, 17.17
C7 ICT Applications: viii. e-science	1.5, 4.7, 6.1, 6.a, 7.a, 13.1, 13.2, 13.3, 14.a, 15.9, 17.6, 17.7
C8: Cultural diversity and identity, linguistic diversity and local content	2., 4.7, 6.b, 8.3, 8.9, 11.4, 12.b
C9: Media	5.b, 9.c, 12.8, 16.10
C10: Ethical dimensions of the Information Society	1.5, 2.3,3.8, 4.7, 5.1, 8.36, 9.1, 10.2, 10.3, 11.3, 12.8, 13.3, 16.7, 16.10, 17.6, 17.7, 17.8, 17.18, 17.19
C11: International and regional cooperation	17.9, 17.16, 17.17