

Smart City Implementation: Integration of Villages and Cities in Purwakarta Regency, West Java Province

Etin Indrayani and Gatiningsih

Institut Pemerintahan Dalam Negeri, Jatinangor, Sumedang

Email: etin.indrayani@ipdn.ac.id

ABSTRACT

This study aims to analyze the implementation of Smart City that integrates villages and cities in Purwakarta Regency, identify and analyze any inhibiting factors that influence the development process of the City of Purwakarta towards the Smart City, identify and analyze the efforts of the Purwakarta Regency government in realizing Smart City. The research method used in this study is a qualitative research method with a descriptive approach.. The results showed that the smart city that was implemented in Purwakarta Regency focused more on the use of information technology to improve services to the community, meaning this concept was more accurately referred to as a digital city. Some programs that have been implemented by the Regional Government are the first steps to realize Purwakarta Regency as a smart city. Barriers and obstacles faced include: not yet comprehensive existing policies to accommodate the problems faced in the implementation of smart cities, ICT human resources are still limited both in quantity and quality, budget limitations cause the existing infrastructure is not optimal, especially in villages, interoperability is not optimal, and blueprint has not been prepared comprehensively. Efforts that have been made by the Purwakarta Regency government include: Several legal products both regent regulations and regent instructions have been issued to support the implementation of smart city, ICT competency enhancement, application interoperability in each OPD, budgeting for device maintenance, Budgeting for developing systems, and budgeting for improving the welfare of ICT employees.

Key words: *Village and City Integration, Implementation of Smart City, Digital City, ICT Infrastructure*

INTRODUCTION

Urbanization that continues to occur in cities causes a decline in the city's performance. Various city problems arise along with the rapid urbanization. Urbanization which is marked by a growing population density makes the city must be ready to face problems due to high population density. The problem of scarcity of resources, the emergence of slums, the problem of waste and pollution, traffic congestion, environmental degradation, are some of the physical problems the city has caused.

The problems of the city are also not only in physical terms, in line with the continued decline in physical quality of the city, the inability of a city to improve conditions will create public mistrust of the government which will trigger social problems. These social problems related to various stake-holders, not only can be resolved by the local government itself, but in its solution requires the role of various parties, so it is increasingly complicated to be solved. The emergence of physical problems and coupled with social problems makes the city more uncomfortable to live in.

In solving the problems of the city, and maintaining its performance, various concepts of development and management of the city continue to be developed by academics and practitioners. Various

concepts that emerge continue to be developed to obtain the right formulation of the concepts of development and management of cities that can provide comfort for its residents and can continue to be sustainable. The concepts that emerge can be the concept of urban development as a whole, and the concepts emerge based on the priority of certain problems, such as the emergence of the concept of green city which prioritizes the existence of green open space which is closely related to the problem of environmental degradation ((Indrayani, 2018).

Along with the progress of the times, technological advances have also inevitably become a breakthrough used by the city to provide maximum service to its inhabitants. So that the concept of Intelligent City, Ubiquitous City, Digital City, Wired City, Information City, and Smart City emerged, these concepts develop by basing the application of information and communication technology in managing cities. From some literature, it can be seen that the concept of Smart City is the end of the development of the concept of development and management of cities based on information and communication technology (Deakin and Allwinkle, 2007). In the definition of Nijkamp et al. in Chaffers et al (2011), Smart City is defined as a city that is able to use HR, social capital and modern telecommunications

infrastructure (Information and Communication Technology) to achieve sustainable economic growth and high quality of life, with resource management the wise through community participation based governance.

The smart city is identical to the model of city development based on the use of human resources collectively, and making technology as capital for improving development and community welfare in the context of agglomeration in a city (Angelidou, 2014). Besides that, although smart cities are popularly associated with several perspectives of intelligence, such as smart economy, smart people, smart environment, smart government, smart mobility and smart living (Giffinger, 2010).

The concept of Smart City is a concept that has gone through improvements from concepts that have previously developed by patching existing deficiencies and taking into account aspects that may not yet exist in concepts based on Information and Communication Technology (ICT) that have appeared previously. This concept ultimately not only bases the development and management of cities in the technological dimension but also includes the human dimension and institutional dimensions (Nam & Pardo, 2012).

In connection with the development of the Smart City concept, understanding of the Smart City concept is not yet clear and consistent. Cities called Smart City initially had a breakthrough in solving problems in the city, which later succeeded in improving the performance of the city. In general, the development of these cities towards Smart City begins with the use of information and communication technology which is usually partial, on priority issues. For example, the city of Amsterdam, which bases the use of ICTs to reduce pollution, or the City of Tallinn, as the Estonian capital, starts smart city management in terms of governance with e-government and uses smart ID cards in services for its residents, as well as the Songdo City in South Korea which basing the development of an ICT-based city to develop Songdo as an international business center.

Smart City is currently a trend in the concept of development in various countries in the world. This concept then triggers fierce competition to develop Smart Cities / Smart Cities with a variety of tools that support the disclosure of public information. According to Purwadi (smartcity-

indonesia.org, 2015), Smart City Development is not just technological development. But rather to move the citizens to participate by providing input to the city government. Technology is not the end goal of Smart City, but only as a tool to improve a better life.

The presence of smart city concepts and the use of ICTs in spatial planning cannot be separated from the position of spatial plans in governance. Innovation, using ICTs, is a reflection of efforts to create better urban governance.

The recommendations from WHAT above reflect that innovation in achieving good governance is necessary, especially innovations that already have sustainable development insights. Innovation here is an innovation that is integrated between the efforts of individuals, groups, and the government itself by paying attention to the system of procedures and the process of development planning itself.

Another important thing is that innovation must bring added value not only at the level of the local but also at the national level. It is also seen that the use of technology is very important to create quality governance, but the readiness of the users and the existing system must be considered so that the impact of the use of technology, especially those not from the results of local research can be anticipated. Also, the following figure illustrates the views of WHAT (World Humanity Action Trust) in addressing existing governance conditions (Callway, 2005 in Rydin, 20015).

The real condition of development in Indonesia which tends to be uneven in terms of the trust as a supporting value for the realization of the Smart City concept is often still an obstacle. Purwakarta is one of the regencies in West Java also plans and is trying to implement the concept of developing Smart City. The concept of Smart City, which is implemented in Purwakarta Regency is more interpreted in the effort of equitable distribution of knowledge-based villages so that the sources of the realization of Smart City can be started from villages. What has been a weak point and has continued to occur so far is that the village does not become an academic value due to the emergence of the village, even though the laying

down of the nation's philosophical ways originates from the village.

The alignment of the village and urban development in Purwakarta Regency is built in an integrated manner. The concept is mutually beneficial, both for rural communities and urban communities. Smart City is built and developed with the emergence of students and academics who develop their regions well. For example, village children are sent to hospitality schools, but these children are not prepared to become hotel employees in the city but can be in their homes in the villages. Then the city people do not need to build a villa at the top or in Lembang which is only filled with servants, but just come to the houses in the village. City people will be invited to stay overnight in the village and be well served by village children, and they must be good at speaking English, and also supporting infrastructure is built. Resulting in the sense of kinship between the village and city communities, and this is meant by the smart city integration of villages and cities without leaving a holistic nuance.

The philosophy is that the village must remain respected and respected, but now there is a social, intellectual degradation in the countryside due to the imbalance in development between cities and villages. If the development of a smart city is left without involving villages, it is feared that it will only produce capitalism. There is a weak point which at present still cannot be erased, namely that there are still thoughts from the village that will not be considered. Whereas laying down the philosophical way of this nation came from the village. One of the concrete steps to build a Smart Village that can form a Smart City is shown by the Purwakarta Regent by targeting all areas of Purwakarta Regency to be connected to 2,000 wireless internet networks or Wireless Fidelity (WiFi) in mid-2016.

It is believed that connectivity is important for creating Smart Cities because internet technology has many benefits if used for productivity mobilization. The Government of Purwakarta Regency has a strong desire to change the consumptive behavior of the community to be productive. Purwakarta seeks to build a spirit of technological literacy. So far, technology has only become a

means of a consumptive lifestyle. From now on, it will be transformed into a productive lifestyle. Currently, an integrated connectivity system is being built in Purwakarta. At the end of 2015, a 57-kilometer long road connecting the city center and villages had just been put into operation. Also, the district with 17 sub-districts and 192 villages is improving the quality and quantity of communication technology, health services, primary and junior secondary education centers, mobile hospitals, and online or online KTP service. All are to be connected and integrated in 2017.

Purwakarta Regency Government, in 2016 has launched an online health service smartphone application called "SEMAR" (Safety Emergency Medical Rescue), this android application can be downloaded through the Google Play Store for free. To take advantage of this service, all you have to do is register online at the application, by filling in your name, address, email to the National Identity Card (KTP) number. After that, the residents or users are directed to the "Call Ambulance" menu. This menu is automatically connected to the ambulance operator who will pick up residents. This application-based health service is only specifically for residents of Purwakarta because it is included with a Resident Identity Number of ID Card. This is so orderly to minimize fun and irresponsible people. This SEMAR application service will also deliver residents to the ward. This means that the Hospital under the coordination of Purwakarta Health Office must be able to move quickly to deal with patients. Connectivity with drivers who are on standby 24 hours will also continue to be built.

The implementation of the smart city program was successful in organizing public services that adopted the use of information and communication technology and realized the principles of Good Governance, especially in the aspects of transparency, efficiency, and simplicity. The policies outlined in legal products relating to the development of ICT in Purwakarta Regency include the Purwakarta Regent Regulation number 60 of 2013 concerning the utilization of information and communication technology in the administration of government in Purwakarta Regency. In this study, an assessment of the successful implementation of

smart city was carried out in various integrated fields between cities and villages in Purwakarta regency. This process is carried out by analyzing the indicators that guide the research. The success of the implementation of smart city by the objectives of the policy is so that its implementation is transparent, quality, accountable and timely. This is in line with the principles of Good Governance. According to Sinambela (2006: 6) the main elements of good governance, namely:

- a. **Accountability:** Accountability is a benchmark in which public funds are used appropriately for the purpose for which the funds were determined and not used illegally.
- b. **Transparency (Transparency):** Transparency is more directed at all policies and implementation of policies both at central and regional levels must always be carried out in an open and publicly known manner.
- c. **Openness:** Openness refers to the opening of opportunities for the people to submit responses and criticisms of the government, which are considered not transparent.
- d. **The legal framework (the rule of law):** Every public policy and legislation must always be formulated, determined and implemented based on standardized procedures that have been institutionalized and known to the general public, and have the opportunity to evaluate them.

Based on the description of the problems above, the research objectives are: a) to analyze the implementation of Smart City that integrates villages and cities in Purwakarta Regency; b) identify and analyze any inhibiting factors that influence the development process of the City of Purwakarta towards the Smart City; c) identify and analyze the efforts of the Purwakarta Regency government in realizing Smart City.

METHODS

The research method used in this study is a qualitative research method with a descriptive approach. Determination of informants using purposive sampling consisting of Key Informants namely the Head of Bappeda and the Board of Directors who have made Smart City Program planning and road maps as well as the head of the

Office of Communication and Information and its staff, Main informants, namely the Head of the Regional Work Unit (OPD) and staff who are part of the implementation smart cities such as the Health Office, Education Office and other related offices, additional informants are employees who act as managers and operators of smart cities. Provider stakeholders (partners) and users of smart city programs and services

RESULT AND DISCUSSION

Utilization of ICT in Purwakarta Regency is regulated in Purwakarta Regent Regulation Number: 60 of 2013 concerning Utilization of Information and Communication Technology in Government Administration in Purwakarta Regency. The purpose of utilizing information and communication technology is to provide data and information easily, quickly, precisely and accurately in an effort to support governance, development, community empowerment and the business world and public services. Whereas the target of utilizing information and communication technology in Purwakarta Regency is:

- a. The establishment and maintenance of a Data Center in support of decision making mechanisms within the Regional Government and the provision of data and information services to the public and business world;
- b. The creation of a mechanism for providing data and information that can be operated through the development and development of information and communication technology systems;
- c. The availability of information and communication technology infrastructure that can connect and integrate data and information between Regional Apparatus Organizations and between Regional Governments and the Central Government, Provincial Governments, Other Regency / City Governments, External Agencies and Communities and Business world to support the realization of e-Governmnet

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Accountability (Accountability): is a benchmark where the implementation of smart city policies can be accounted for procedures and results at each stage of its implementation.

The concept of "Smart City" or Smart City is considered as a solution to improve services to the community. By utilizing information technology, this concept must be supported by a modern state civil apparatus (ASN). With easy access to implement government-based electronic applications and with relatively affordable costs for Local Governments to implement them, local leaders no longer conduct comparative studies that waste travel budgets to smart city cities, but instead have to carry out imitation studies, so regional governments can directly use leading smart city applications which are the innovations of the smart city role model.

The Government of Purwakarta Regency also seeks to develop and develop this concept to support the creation of better public service solutions for the community. To be able to better serve the community, consolidation and coordination in the internal environment need to be addressed first. One application developed to improve the accountability of smart city implementation procedures at each stage is the electronic work application (AKSEL) by SETDA Purwakarta Regency.

AKSEL Information System in SETDA Purwakarta Regency is an Electronic Work Application that is used in a web-based SETDA environment that is integrated using an intranet network as a means of communication and handles issues between correspondence between parts via email. So this application is an internal application within the Purwakarta Regency regional secretariat.

AKSEL (Electronic work application) is Indonesian language software which is a solution for communication, organization and coordination problems in a company, so that the needs in the company can be done in a more effective way. AKSEL is a modification application of KANTAYA virtual letters from BBTP.

AKSEL Information System in SETDA Purwakarta Regency is expected to be a means of working communication for all employees at each level but there are still some obstacles in the socialization stage and the migration process from the manual system to AKSEL. Some parts are still not able to use AKSEL optimally.

Increased accountability is a key component of bureaucratic reform and governance organizations. ICTs have had very diverse impacts, supporting accountability in some cases, but can also be biased and cause disturbances in other respects. Computerized or manual information systems are an important part of government accountability. However, the new information system has the expected impact mainly influenced by management decisions and organizational factors and the environment that must be conducive (Indrayani and Gatingsih, 2013).

Transparency (Transparency): Transparency is more directed at all policies and the implementation of policies both by the related Agency / Service must always be carried out openly and publicly known.

The level of transparency in the design and implementation of policies in the relevant agencies / agencies can be observed and illustrated in the implementation of the following applications:

1. Saluyu (One General Service) Purwakarta

Is the official mobile application of Purwakarta Regency Government (Android and Blackberry versions) to help provide information on public services to the entire community. This application is the official application of the first district government in Indonesia. This application is an innovation from Section Kaharti Setda Purwakarta based on HP has been widely used by the community and to facilitate citizens who need service info and licensing requirements in the district. Purwakarta. The presence of a public service in the grip of the Android gadget and Blackberry mobile application SALUYU (a public service) Purwakarta, contains information on public services provided by the district government some of these services include:

2. Application of Integrated Licensing Service Management Information System (SIMPADU)

One of the tasks of the Government which is also the right of citizens is the implementation of public services. Licensing is a form of public service that is very strategic and sometimes it is often used as an indicator of governance performance whether it is considered good or not.

One of the commitments to improve services in Purwakarta Regency is realized by Regional Regulation number 11 of 2007 concerning the establishment of the One Stop Investment and Services Agency (BPMPTSP). Through BPMPTSP services regarding investment and various types of licensing and non-licensing which were initially disputed in several Regional Apparatus Organizations (OPD), will now be "united" so that they are expected to be able to be implemented more quickly, effectively, efficiently, transparently and accountable.

While the existing system at Purwakarta's One-Stop Integrated Investment and Services Agency (BPMPTSP) has been computerized, it is still not able to handle all licensing activities at the Purwakarta Integrated One-Stop Investment and Services Agency (BPMPTSP). For this reason, efforts are needed to improve the existing system to increase efficiency and effectiveness in performance. To make the performance of the One-Stop Integrated Investment and Services Agency (BPMPTSP) better. By adopting the concept of "learning organization", at the beginning of its formation BPMPTSP gradually only handled 51 types of licenses, non-licenses and investments of about 107 types of permits / non-licenses and investments held in the Government of Purwakarta Regency.

The One-Stop Integrated Licensing Investment Board (BPMPTSP) of Purwakarta Regency won the 2016 Investment Award as one of the best integrated licensing (investment sector) in Indonesia. This proves investment licensing services that are fast, easy, and professional in Purwakarta can be seen from the growing business climate in Purwakarta, an increasingly large industrial area, and a good level of investment security.

3. Application of the Regional Legal System (SISKUMDA)

SISKUMDA is realized in the form of JDIH (Legal Documentation and Information Network) District. Purwakarta version 2, to improve services to legal information and legislation from the legal section of Purwakarta, has released the JDIH

(Legal Documentation and Information Network) system / website. Purwakarta version 2 is an improvement from the publication of JDIH (Legal Documentation and Information Network) Kab. Purwakarta for the first version in 2013.

JDIH (Legal Documentation and Information Network) Kab. Purwakarta is a media of information / Library of data and information services regarding Laws and Regulations, you can access and download data of Laws and Regulations that you may need.

With the release of its JDIH (Legal Documentation and Information Network) Kab. Purwakarta, from the Legal Division of SETDA Purwakarta through the JDIH website (Legal Documentation and Information Network) Kab. Purwakarta at this address <http://bagianhukum.purwakartakab.go.id/> can further enhance better information services to the people of Purwakarta, especially regarding Laws and Regulations.

4. SEMAR / Safety Emergency Medical Ambulance Rescue Application

The District Government (Pemkab) Purwakarta launched an online ambulance application to meet the needs of the community in health services. The online-based application named Safety Emergency Medical Ambulance Rescue or Semar. Semar application has been available for mobile (HP) with the Android operating system. At first glance this application is not much different from the online motorcycle taxi application. Later, prospective patients only need to order an ambulance through the Semar application, which is directly connected to the operator. The operator will later call the order to confirm the order. Afterwards the nearest ambulance will immediately approach the patient.

In addition to the on call ambulance service feature, the semar application also features a search for the nearest GIS-based hospital or puskesmas with the patient's location. Another feature is Drupadi is a link to make calls to general practitioners and midwives if the community needs it at any time.

To avoid idle society, the Semar application is specifically for residents of Purwakarta Regency who have an e-ID card as the basis for registration. After being registered, the community can activate Semar

and summon an ambulance. So residents who have registered can immediately make calls through Semar. The target is for 10 minutes the ambulance can reach the patient. This application system does not stop until pickup. Each ambulance driver can be said to have finished the task when the patient has entered the treatment room. This means that the Hospital under the coordination of Purwakarta Health Office must be able to move quickly to deal with patients.

The online health service makes Purwakarta part of the district that implements Smart City with the ease of online services. "Purwakarta Smart City or Technopolis, the government is doing a fast service, for SEMAR is completely free. This service utilizes all population data that is already online. At present, of the 120 active ambulances, there are 40 units ready to serve the Semar application. While the rest will serve the community manually or use the SMS Center with the number 08121297775. To build the Semar application. Purwakarta Regency Government budgeted funds of around Rp 500 million. This includes manufacturing systems, computerization, and cell phones for android type drivers. Operators and drivers have 24-hour standby. They work in a shift way to serve the community.

Openness: Openness refers to the opening of opportunities for the public to submit responses and criticisms of the implementation of smart cities related to requests for information or complaints in the implementation / services related to smart cities

The level of openness in providing opportunities to the public gets a response to smart city policy information and complaints from smart city implementation and other development issues can be observed from the presence of several services that can bridge community communication with local governments, namely:

1. PLIPMAS (Community Information Service Center)

Plipmas is a Purwakarta Regency Government agency that functions to facilitate requests for information and public complaints within the Purwakarta Regency Government. This institution, which was founded in 2013, is a collaboration between the Government of Purwakarta Regency and the Bandung Trust Advisory Group (B_Trust) and is supported by the European Union.

In general, PLIPMAS has 2 main functions, namely serving requests for information from the public as stipulated in Law number 14 of 2008 on Public Services, as well as handling public complaints relating to public policies, public services and the behavior of public officials. The public can submit information requests and submit complaints relating to the Purwakarta Regency government through this Website, or submit them through direct visits, Fax and SMS.

Requests related to the information in question are in the form of information, statements, ideas, and signs that contain values, meanings and messages, both documents, data, facts and explanations that can be seen, heard and read presented in various packages and formats in accordance with the development of electronic and non-electronic information and communication technology. While community complaints are a form of application of community supervision submitted by the community to the Center for Information and Complaints Services in the form of contributions of thoughts, suggestions, ideas, or complaints / complaints that are constructive.

A simple scheme / channel for Information and Handling of Public Complaints Services via SMS can be seen in Figure 1. In Figure 1 below it can be seen that the public can submit complaints via letter / fax or website to PLIPMAS. Every complaint submitted will be directly responded by PLIPMAS. Then Plipmas will collect every complaint submitted and then test the evidence in the form of letters and / or witnesses and / or confessions. The next step PLIPMAS will conduct clarification and checking to the reported or public bodies reported by the public. After getting the appropriate data and information, then PLIPMAS prepares answers to be submitted to the complainant (the public). If the community is satisfied with the answers submitted, the complaint process is considered complete, but if the community is not satisfied or objected to the answers submitted, PLIPMAS can mediate between the reporter and the reported / public body so that the problem can be resolved. However, if it has been mediated and still cannot solve the problem, PLIPMAS will make a study and submit it to the Regent. then the district head will deal directly with complaints submitted by the community.

2. La Pewarta (Purwakarta Citizen Complaints SMS Service

La Pewarta (Purwakarta Citizen Complaints Service) aims to increase citizens' satisfaction with public services that are fast, accurate, easy and inexpensive and accountable and reduce the number of citizen complaints (Zero complaint). La Pewarta is intended to manage SMS complaints or complaints from citizens regarding the implementation of Purwakarta Regency public service (complaint handling management).

This La Pewarta application is an integrated SMS complaints and complaints from Purwakarta residents, where citizens' sms will be sent directly to the Regent and related officials in accordance with the contents of residents' complaints or complaints. Then the SMS will be answered directly by competent officials and residents and the regent will receive the answer directly on his cellphone.

Technology Development (KAHATI) as the Net-work Operation Center. The policies set forth in the legal products relating to the development of ICT in Purwakarta Regency include:

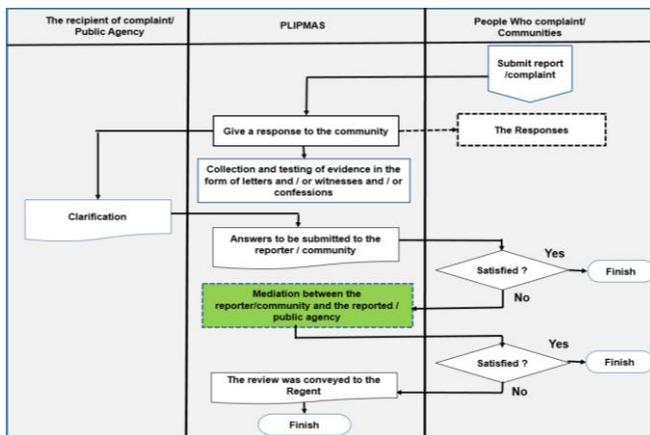
- a) Purwakarta Regent Regulation number 60 of 2013 concerning the utilization of information and communication technology in the administration of government in Purwakarta Regency
- b) Purwakarta Regent Regulation number 61 of 2013 concerning Server Operational Standards and Management Procedures in the Purwakarta Regency Government
- c) Purwakarta Regent's Instructions No. 1 of 2010 concerning the Obligation to use and use Legal and Free Open Source Software (FOSS) Based Software

Meanwhile policies related to the decision to implement ICT policies include:

- a) Purwakarta Regent Letter number 555/998 / Kaharti dated April 16, 2009 concerning the Use and Utilization of the Use of Legal Software in the Environment of Government Agencies
- b) Joint Decree of the Head of West Java Provincial Representative of the Indonesian Supreme Audit Board and the Regent of Purwakarta number 07 / KB / XVIII.Bdg / 11/2012 and 180/12 / Huk / 2012 regarding technical guidelines for developing and managing information systems for data access to the Government Purwakarta Regency in the framework of examining the management and responsibilities of state finances.

The regulation is implemented and the evaluation continues to be related to adjusting the development of existing information technology. OoiTIK evaluation / audit activities have been carried out legally, both by internal and external parties. IT audit in relation to the regular budget is carried out by agencies engaged in the audit field, namely for internal from the Inspectorate of Purwakarta district and for external from the Republic of Indonesia's Supreme Audit Board.

Public service improvement conducted by the local Government of Purwakarta Regency is increasingly being improved in line with the launch of the concept of smart city, which consists of 6 dimensions, namely smart economy, smart



Source: KAHATI Section of Regional Secretariat of Purwakarta, 2016

Figure 1. Simple Flow of Handling of Complaints Directly on Letters / Faxes or Websites

Rule of law: Legal framework: Every public policy and legislation must always be formulated, established and implemented based on standardized procedures that have been institutionalized and known to the general public, and have the opportunity to evaluate them.

The availability of smart city implementation policies in the form of regulations that are formulated based on the order of the applicable laws issued to accommodate ICT priorities as outlined in the RPJMD document, ICT in Purwakarta Regency is part of the mission in the SKPD in relation to the Making of an Information System Application to support statistical data The Regional Organization (OPD) is meant while the ICT network infrastructure is managed by the Cooperation, Inter-Institutional Relations and

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environment, smart people, smart life, smart mobility and smart government (as stated by Giffinger, 2010). Improved services in all fields (especially in the provision of adequate transportation facilities and infrastructure, development of MSMEs, especially those based on local products, ease of licensing) can support the development of the tourism sector in Purwakarta Regency, which is one of the missions of Purwakarta Regent Developing Local Wisdom-Based Development Value of Religiosity, Oriented Excellence in Education, Health, Social Welfare and Equitable Economic Equity for All Communities.

The direction of infrastructure development in Purwakarta Regency is realized through the strengthening of the urban and village infrastructure planning system; river flow development; improvement of the quality and quantity of clean water; transportation system development; housing and settlement development; and improving the consistency of controlling infrastructure development. The availability of transportation facilities / infrastructure and adequate infrastructure will improve the quality of life of the community and at the same time be able to invite investors into Purwakarta Regency so that it will encourage the development of tourism, increase economic growth and public welfare.

The management of urban infrastructure even extends to the villages that are developed in the future is an integrated and oriented management system to ensure public interest. Balancing the involvement of the three main stakeholders of Purwakarta Regency, namely the government, the community and the private sector, is an absolute must. Development always requires capital, both economic capital (economic capital), human capital (human capital) and social capital (social capital). Easy access to capital and training for MSMEs can improve their abilities and skills in developing their businesses. Social capital including its elements such as trust, mutual cooperation, tolerance, appreciation, mutual give and take and social collaboration have a great influence on economic growth through various mechanisms such as increasing sense of responsibility towards the public interest, expanding participation in the democratic process, strengthening harmony society and decreasing crime rates. This value system needs to be maintained in the social life of the Purwakarta community.

CONCLUSIONS and DISCUSSION

Based on the results of research, it can be concluded the following points:

- a. Referring to the mid-term development direction (RPJMD) of Purwakarta Regency, it appears that the local government has prepared human resources and science and technology to realize Purwakarta Regency towards a smart city. But the definition of a smart city which is implemented in Purwakarta Regency is more focused on the use of information technology to improve services to the community, meaning this concept is more accurately referred to as a digital city. Some programs that have been implemented by the Regional Government are the first steps to realize Purwakarta Regency as a smart city.
- b. Barriers and obstacles faced by Purwakarta Regency Government include various aspects including:
 - Not yet comprehensive the existing policies to accommodate the problems faced in the implementation of smart city
 - Still limited in both quantity and quality
 - Limited budget means that the existing infrastructure is not optimal, especially in villages
 - Interoperability is not optimal
 - Blueprint has not been compiled comprehensively
- c. Efforts that have been made by the Purwakarta Regency government include:
 - Several legal products, both regent regulations, and regent instructions have been issued to support the implementation of smart city
 - use the pattern of distribution in each OPD with the concept of an IT operator who gets a decree from the Regent of Purwakarta and Sends staff to improve ICT competencies
 - Application interoperability in every OPD, Make an appeal to use legal software and clear ICT network topology
 - Emphasize using virtual letters in the implementation of work and management policies (admin) for e-government applications.

- Budgeting for device maintenance, Budgeting for developing systems, and Budgeting for improving the welfare of ICT employees
- Publicize ICT development at the provincial and national level, Participate in PEGI (Indonesian Government E-Rating), and Publicize ICT development to OPD to optimize the use of available infrastructure & content.

RECOMMENDATION

Related to some problems and obstacles faced by Purwakarta Regency Government in implementing a smart city, the following are suggested:

- a. Complete SOP and manual documents for all processes by established standards. District Government. Purwakarta is advised to pay attention in terms of risk management if one-day problems can be detected and sought solutions as early as possible
- b. The local government needs to have a strong commitment to realizing Purwakarta Regency as a smart city. Handling and managing aspects that support the implementation of the smart city should not be borne by the Kaharti Section alone, but also be a multi-OPD responsibility, such as Bappeda, Public Works Office, Office of Cooperatives and SMEs, Office of Sanitation and Parks, Office of Transportation and other stakeholders
- c. Purwakarta Regency is recommended to conduct internal assessments regularly to be able to measure the capability of the system currently achieved to be an evaluation material for improvements in the future.

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