The Policy to Optimization of Social Media for Traffic Management in Islamic Perspectives

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Abstract: This study discusses on how information and communication technology-based policies in the field of transportation was carried out by the Department of Transportation, City of Surabaya, through the Surabaya Intelligent Transport System or SITS program. This research used the theory of technological determination and public policy as the basis of thought. In addition, the concept of maqāsid syari'ah was also used to consider how the implementation of this policy, towards the benefit or welfare for the society, in an Islamic perspective was done. Descriptive qualitative method with literature review approach was used as a framework for formulating conclusions. Data collection was carried out through searching literature and other documents related to the topic. The results of this study indicated that the SITS policy of the Department of Transportation, City of Surabaya, was running well and had positive impact. This public policy which utilizes digital media was in line with the concept of maqāsid syari'ah.

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1. Introduction

Society is increasingly familiar with the internet network (Castells, 2004). All spheres of life, such as economic, social, political and the other aspects, which concern the public interest at large, often come into contact with digital media (Mustika, 2019). Therefore, the development of information and communication technology must be synergized with efforts to implement government policies (Budiati, 2006).

The utilization of information and communication technology or digital media related to the lives of many people is a challenge in the era of new media (Kriyantono, 2015). Efforts to strengthen the closeness between digital technology and society are consequences of the existence of the information society (Sugihartati, 2014). All government agencies, including offices at the local or city
government level, need to innovate for a better life for the people (Cohen, 2014). Thus, public policies issued can provide concrete benefits for the residents in the city (Anderson, 1984).

In the era of new media such as nowadays, there have been many public policies that suit current conditions, for example, the West Java Tourism Office is developing promotions through Instagram (Sumara, Saepudin, & Dwi Aksa, 2019). There is also the National Archives of the Republic of Indonesia which in public relations management concentrates on optimizing digital media (Kharisma & Agustina, 2019). In essence, government agencies, central, provincial, and district/city governments in Indonesia are competing to optimize the use of technology. In fact, the utilization of digital media at the village level also occur continuously (Oktiani & Gunawibawa, 2019).

One of local governments which is focused and sustainable in utilizing digital media for public services is the Surabaya City Government. Surabaya City Government is listed as one of the pioneers in the development of information and communication technology for public services. The public service system through an internet-based electronic application in Surabaya was developed since 2003 when the e-Procurement application was launched for the procurement of goods and services (Yuwinanto, 2013).

Thus far, the development of internet-based applications and digital media in Surabaya has been increasingly varied, including e-Health in the health sector, e-Musrenbang or development proposals at the village level online, Surabaya Single Window for licensing management services, and any other scopes. Those are many excellent programs have also been created based on digital media optimization, both in the people's economy, creative industry, education, and the other sectors (Rachman, 2019).

All regional apparatus strive to create public service applications in order to be efficient and effective. The aim is to provide excellent services for Surabaya residents in all fields and to build integrated communication through digital media (Rachman, 2019). The Surabaya City Government's quick response to the growth of the digitization is really needed by people who are generally “integrated” with the internet (Gere, 2008). Moreover, urbanites have characteristics that are sensitive to technological developments and make the virtual world a space for interaction and expression (Rachman, 2017).

One of the regional apparatuses in Surabaya that has always used information and communication technology in public services is the Department of Transportation. This study discusses the development and utilization of digital media from the transportation sector, through the Surabaya Intelligent Transport System or SITS program. The policy implemented by the Surabaya Transportation Department is in accordance with the principles of technology determination theory which states that technology affects society. On the other hand, technology develops in line with the needs of society. There is an intertwined relationship between technology and society (Marx & Smith, 1994). Which leads to a conclusion that technology changes the way of people interact, communicate, and share information in society (McLuhan, 1962).

The government should make policies in accordance with the living conditions of its citizens (Dye, 1972). Therefore, the transportation policy in Surabaya could be different from the transportation policy in other regions. Surabaya is known as a city that has a relatively high population density. As a result, the number of existing vehicles passing through this city is relatively large. Thus, the potential for traffic jams, traffic violations, and accidents always threatens residents. Starting from these conditions, the Department of Transportation initiated SITS (Bagian Organisasi Pemerintah Kota Surabaya, 2019).

SITS is an improvement of the ATCS system or Area Traffic Control System which was a grant from Spain 1992-1994. In the past, ATCS among all the intersections within the city, did not coordinate each other. In the other side, a traffic light changed color is only based on duration. Through SITS, the traffic lights changes color based on traffic density sensors and synergizes among
all intersections making it easier for motorists. SITS also provides an overview of the best alternative routes for residents through realtime CCTV camera reports that can be accessed 24 hours, the application can be downloaded via Google Play.

Through the Islamic perspective, all public policies carried out by the government in all level, central, provincial, and regional/city, can be examined through the concept of maqâsid syari’ah. Maqâsid syari’ah is the objectives of implementing a policy, regulation, or law, which must rely on the benefit or welfare of the people (Al-Zuhaili, 1986). One of the Islamic scholars, Muhammad Thahir Ibn Asyur, divides maqâsid syari’ah into two, namely maqâsid syari’ah al-‘âmmah and maqâsid syari’ah al-khâṣṣah (Al-Ghali, 1996).

Maqâsid syari’ah al-‘âmmah is the aim of sharia, law, regulation, which includes the public benefit in general. Meanwhile, maqâsid syari’ah al-khâṣṣah is a specific objective of sharia, in the small circle of individual daily life, which examines various issues, including on family law, the use of individual property, individual worship, and the other certain problems (Ibnu Asyur, 1985). Theoretically, maqâsid syari’ah is the basis for establishing the law, regulation, even policy. Each must be standardized on the maqâsid syari’ah or the goals of the benefit of the people. In the context of this study, the public policy on the use of social media for public transportation services must be in line with the goals of the benefit of the people. Maqâsid syari’ah has the main objective of preventing harm to humans and bringing benefits. Society must be directed towards truth, justice, virtue, and use reason well (Al-Jauziyah, 1969).

The policy of using social media as a supporter of public transportation policy, particularly regarding the traffic management, should aim for the benefit of the people or good. The purpose referred to the concept of maqâsid syari’ah has five general principles, namely, to protect religion, to protect soul/life, to protect mind/thoughts, to protect property, and to protect progeny (Al-Syathibi, 2003). Based on the explanation above, this study discusses how the implementation of the utilization social media on traffic management as public service in Surabaya, based on Islamic perspective is.

2. Methodology

This study uses descriptive qualitative methods to describe facts in society within a certain area, related to certain fields (Hasan, 2002). The area in the context of this research referred to the city of Surabaya, while the main subject was the public policy of the use of digital media held by Surabaya Transportation Department. The approach used was literature study, which utilized library sources to obtain data (Zed, 2008). The library sources used will not be separated from this theme. The sources came from internal Surabaya City Government, as well as externals. Other sources that were used as references are literature relating to the theory of technological determination, public policy, and the concept of maqâsid syari’ah. Data analysis techniques were carried out through reduction, presentation, and formulation of conclusions (Miles & Huberman, 1994). The results of data analysis were described according to appropriate categorization in order to obtain a factual picture of the topic being discussed (Bogdan & Taylor, 1990).

This research used the theory of technology determination as the main basis for discussing the use of digital media. This theory stated that humans and technology were two entities that influenced each other (McLuhan, 1962). In addition, theories and concepts regarding public policy are complementary to describe how public services should be a solution to problems in society (Dye, 1972; Anderson 1984). There were three problem formulations in this qualitative study. First, this study explored the use of digital media by Surabaya Transportation Department, as a phenomenon of communication technology determination. Second, it explained the implementation of public policies in the form of the use of digital media in line with the perspective of sustainable development goals (SDGs) set by the United Nations or UN (United Nation, 2015a). The UN Resolution on SDGs
expects all public policies at the central, provincial and district / city government levels to be aligned with a minimum of one out of seventeen SDGs points (Rachman, 2020). Third, it described this policy which was viewed from Islamic perspective through the concept of maqāsid syari’ah.

3. Results and Discussion

a. Digitization of Traffic Management

The existence of internet-based digital media that integrated citizens and government was evidence of the implementation of technological determination. The Surabaya Transportation Department strengthened the role of information and communication technology in two aspects, first, the creation of applications that can be downloaded for free on Google Play and activation of social media accounts. The applications referred to include, SITS CCTV Surabaya, KIR Surabaya, My Transport, Surabaya City E-dishub, Go-Parking, and Suroboyo Bus/Go-Bis. This research focused on discussing SITS, so the application that was the priority for the discussion was SITS CCTV Surabaya. Meanwhile, the social media accounts can be accessed through the website www.dishub.surabaya.go.id, twitter @sits_dishubsby, facebook @Dinas Perhubungan Kota Surabaya, Surabaya Transport Department, Instagram @dishubsurabaya, and YouTube @Dishub Surabaya.

Based on media and communication perspective, the policy was adaptive to changes in the way the community communicates. As it was understood, the new media era shifted and dynamized the communication model, because the messages conveyed or responded to various forms: in the form of audio, visual, text, and so on (Meyrowitz, 1999). Interactions also occurred through information and communication technology devices (Holmes, 2005).

Social media had at least four characteristics. First, the message conveyed can be received by one or more recipients. Second, messages can be conveyed without going through the editing process. Third, the delivery time of messages can be in the range as fast as possible. Fourth, the interaction time can be determined by the recipient of the message, based on when the recipient wants to access the message (Gamble & Gamble, 2002).

The SITS program, apart from using the SITS CCTV Surabaya application tool, was also integrated with all the social media accounts of The Surabaya Transportation Department. SITS was not just a monitoring center, but had the ability to anticipate and be reactive to road conditions. Traffic management was also supported by qualified human resources who can interact with residents for 24 hours a day.

SITS made the transportation mechanism on the road smooth, which certainly had a relationship to effectiveness and efficiency. Before SITS was implemented, there were often complications at the intersection that intersected the railroad latch. After the SITS program was implemented, there was a sensor that was integrated with the railroad latch, so that traffic flow in the direction of the train's movement got a green wave or became an integrated green light line on the traffic light. In addition, among the intersections had also been integrated, so that a green wave can occur in a certain area. The existence of green waves reduced travel time and the density of vehicles on the highway, so that pollution can be further eroded (Bagian Organisasi Pemerintah Kota Surabaya, 2019).

The website www.dishub.surabaya.go.id contained the latest news and an explanation of the agency's policies and programs. There were a number of menus on this page including homepage, e-transport (which contained various public transportation in Surabaya), e-dalops (which contained control and operations regarding this agency), e-terminal (which contained about terminals managed by this agency), e-traffic (which contained traffic in Surabaya), e-PKB (which contained motor vehicle tax), e-parking (which contained parking), and e-sarpras (which contained facilities and infrastructure in this agency). This website also provided a special link to transportation ticket providers, as a form
of synergy with State-Owned Enterprises or private parties that provided tickets for the public, including residents of Surabaya.

Twitter account @sits_dishubsby was first released in October 2010 and was active in updating content. The contents included videos of random CCTV video points given a special topic called Traffic Update. Generally, the report was regarding the Surabaya protocol roads. In order to provide an overview of road users who were online about any location where traffic congestion and smoothness occur. This account had 259,200 followers.

The facebook account @Dinas Perhubungan Kota Surabaya - Surabaya Transport Department was released for the first time on March 7, 2011 and was classified as active in updating its status. Its contents were regarding the socialization of the program of the Surabaya Transportation Service and the Surabaya City Government in general. This account had 35,284 followers. Just like the Twitter account, on Facebook, the Surabaya Transportation Department also often uploads videos of the latest traffic situation in Surabaya. Generally, the location of the video taken was the Surabaya protocol streets.

The Instagram account @dishubsurabaya had 5,066 posts and 190,000 followers. Its contents were regarding with the socialization of the program of the Surabaya Transportation Department and the Surabaya City Government in general. There were a number of announcements regarding traffic control or traffic engineering in Surabaya at certain moments, for example, when there was a diversion of lanes due to repairs at one point or certain mass activities. This account also sometimes uploaded CCTV videos of SITS from a number images of protocol roads in Surabaya.

The YouTube account @Dishub Surabaya was released for the first time on May 3, 2013. On average, there were five uploads per month, and until March of 2021, there were 7,698,780 views had been watched. There were 20,000 subscribers on this account. The content of the uploaded video was the socialization of programs from the Surabaya transportation service and the Surabaya City Government in general. Also, there were lots of uploads about good driving tutorials as well as about how to get the Surabaya Transportation Department services easily. Digital media had a number of advantages that can be used as a means of collaboration, empowerment, participation, and time efficiency. This internet-based media grew continuously. The government as a policy maker was required to make the best utilization of it for the benefit of society (Jaeger, Bertot, & Shilton, 2012). So far, the Surabaya Transportation Department had made strategic innovations in utilizing applications and social media.

Based on the facts above, the Surabaya Transportation Service had optimized five social media platforms, namely, website, Twitter, Facebook, Instagram, and YouTube. The optimization aims to maximize public services in the transportation sector, through the SITS program. Through social media, interaction between the community and the Surabaya city government can also be carried out directly. In other words, there was public participation in policy oversight. Public participation through social media can influence the government to make improvement regarding policies sustainably (Fadlan, Khaidir, & Putri, 2019). The openness of virtual public space allowed the citizen to express their aspirations to the Surabaya Transportation Department directly. The local government can also obtain more comprehensive information from social media. In other words, the optimization of social media can provide benefits to all parties, both the community and the government (Susanto, 2018).

b. Maqāsid syari‘ah and Sustainable Public Policy

In the concept of Maqasid Syariah, there are five basic elements that must be protected, namely, religion, soul/life, mind/ thoughts, property, and progeny (Al-Syathibi, 2003). Based on the observation, the policy on the use of social media in traffic public services was in harmony with the spirit of protection for life. The reason was, with real-time traffic information, traffic order can be
better maintained. The public can also get clear information. This certainly had an effect on reducing the number of traffic accidents.

This policy was also in harmony with safeguarding human minds and possessions. Logically, accidents can result in losses, including loss of mind. There were many cases of accidents that caused the human brain to damage. In addition, accidents can also result in loss of property. Furthermore, accidents can also be detrimental to the offspring of the victim. Offspring of victims can get negative effects from an accident. It can be concluded that the policy had the aim of safeguarding the benefit of the people and realizing goodness in the aspect of land transportation.

Meanwhile, there were many definitions of public policy concepts or theories put forward by experts. In principle, public policy was an action taken by the government, both at the central and local levels, which had an impact on society (Anderson, 1984). In the Islamic perspective, public policy should be oriented to the interests of the community (Kulsum, 2020). All of these policies had the goal of making citizens prosperous. Implementing activities of all policies were structures in government.

There are three hierarchical levels in policy implementation, namely, the policy level, organizational level, and operational level (Bromley, 1989). In a democratic country, the policy level was generally played by the judiciary and the legislature. While the organizational level was played by executives. There was also an operational level played by the implementing agency, the private sector, or elements of society that were directly related to the policy. A policy always had an institutional arrangement or regulation. In Indonesia, it can be in the form of Laws, Government Regulations, Regional Regulations, Regent Regulations, and so on.

Optimization of digital media carried out by the Surabaya Transportation Department was a public policy that was in accordance with the recent challenges. In this context, the policy level holder in this policy was the regional people's representative council (DPRD). Based on the ratification of the Surabaya DPRD, on the Regional Revenue and Expenditure Budget (APBD), the policies listed in the budget at the Surabaya Transportation Department, can run well and sustainably. Meanwhile, the organization level was played by the Surabaya City Government as the executive, and the operational level was carried out by the Surabaya Transportation Department, the private sector, and the community who were in direct contact with this policy. Regional regulations regarding APBD, mayor regulations relating to SITS, as well as regulations or circulars issued by the Head of the Surabaya Transportation Department were the institutional arrangements for this policy regarding the use of digital media in traffic management.

There are three stages in public policy, namely, formulation, implementation and evaluation (Tacjhan, 2006). The formulation stage was usually carried out by the executive, it can also involve the legislature. Because the budget of the activities was related to the APBD, the formulation was carried out between the Surabaya City Government and the Surabaya DPRD. This formulation led to the creation of binding regulations.

The public policy implementation stage was carried out by executives who directly touch the public. Regulations or rules regarding policies become guidelines that must be followed in the implementation process (Grindle, 2004). At this stage, a policy can have an impact on society, both negative and positive (Van Metter & Van Horn, 1975). Therefore, a number of experts said that implementation was a policy-determining stage, from which further stages or evaluation can be carried out (Ripley & Franklin, 1987). One of the most effective ways to evaluate a policy was to objectively analyze the condition of the community before and after the policy was implemented. The point to be seen was about usefulness, considering whether applied policies must have a positive impact and have concrete benefits for the community (Dunn, 2000). As mentioned above, because of this policy, congestion can be minimized and pollution can be reduced. The public can also monitor traffic. It meant that there were positive impacts after this policy to be implemented.
On the other hand, this policy was also being evaluated. Evaluation was carried out in stages. Evaluation of traffic management and regulation at each intersection was carried out by the Surabaya Transportation Department operator team. Monitoring in the field of the road was carried out in real time because there were cameras that continuously recorded the intersection.

The policy evaluation was carried out directly by the Mayor of Surabaya who had special attention to every traffic issues. Traffic congestion was believed to have an impact on people's stress levels, which can reduce the quality of life. Therefore, the Mayor of Surabaya tried to make traffic in this city run as smoothly as possible. Although indeed, as a big city, traffic congestion cannot be completely eliminated. The Surabaya Transportation Agency was also open to criticism, suggestions, and input from the DPRD, residents, and any party. Therefore, the social media of the Surabaya Transportation Department was always online to receive constructive criticism, suggestions, and input.

On the official website of the Surabaya Transportation Department, there were some links to social media accounts and official email dishubsurabaya@gmail.com, which can be used as a center for public complaints. On the official page, there was also a link to www.mediacenter.surabaya.go.id, which was an interactive page belonging to the Surabaya City Government, specifically for public service complaints. Criticism, suggestions, and input on social media accounts were immediately responded to. One proof of this, this agency did not delete comments from residents that contain criticism. For example, which were posted on Twitter on July 5, 2020, in the theme Traffic Update. At that time, the Surabaya Transportation Service twitter explained about an orderly physical distancing area that had been reopened on Tunjungan Street, Pandegiling Street, and Darmo Street from 3 July 2020 until 9 July 2020 at 21.00 - 05.00 WIB. Comments that replied to the tweet were classified as critical, including discussing policies that were considered less than optimal. With that in mind, the crowds were not there at the time, but moved to other places.

On the Facebook account of the Surabaya Transportation Department, an upload on July 21, 2020 regarding electronic payments at the Joyoboyo Intermodal Terminal, a resident gave input on another topic. The input in question contained about the existence of illegal parking attendants on Rajawali Street. This kind of parking attendant was considered to be unsettling for residents. On the Instagram account of the Surabaya Transportation Service on July 21, 2020, there was a post regarding the operation of implementing Mayor Regulation Number 33 Year 2020, on the land transportation mode regarding compliance with wearing masks during the Covid-19 pandemic. There were also comments containing input on that post. The input in question calls for operations or raids on compliance with wearing masks to also be carried out in small markets so that traders and buyers adhere to health protocols.

Meanwhile, every year, the addition of tools to complement the SITS program continued to be carried out on an ongoing basis. Logically, the more CCTV and its complementary devices touch all corners of the city, the better it was for transportation governance in Surabaya (Bagian Organisasi Pemerintah Kota Surabaya, 2019).

There were a number of lessons that can be learned from the policy of utilizing digital media by the Surabaya Transportation Department. First, learning for local governments about the importance of continuing to innovate in information and communication technology. Because, technology determination was inevitable in this present era. On the other hand, this policy cannot run smoothly without the synergy of many parties, both within the Surabaya City Government and collaboration with external parties. Second, learning for Surabaya residents about the importance of utilizing technology in positive ways, among others, to monitor traffic. Thus, residents can more precisely find traffic lanes and can minimize the negative impact of congestion.

In terms of public policy, on 2015, the United Nations launched seventeen points SDGs (Sustainable Development Goals) or sustainable development goals, which are expected to be the basis
of policy making in society. Policies implemented by governments at all levels, around the world, were expected to be compatible with one or more of these goals (United Nation, 2015b). There are also seventeen points, namely No Poverty (eradicating poverty), Zero Hunger (eliminating hunger), Good Health and Well-Being (ensuring a healthy and prosperous life), Quality Education (realizing quality education), Gender Equality (realizing gender equality), Clean Water and Sanitation (ensuring the availability of clean water and good sanitation), Affordable and Clean Energy (ensuring people have access to clean energy), Decent Work and Economic Growth (ensuring job availability and economic growth), and Industry, Innovation and Infrastructure (developing industry, innovation and infrastructure for the welfare of society).

Other points include, Reduced Inequalities (eroding gaps in society), Sustainable Cities and Communities (realizing sustainable cities and communities), Responsible Consumption and Production (realizing consumption and production that is effective, efficient, and responsible), Climate Action (had a role to respond to climate change), Life Below Water (managing water resources responsibly), Life on Land (managing land resources responsibly), Peace, Justice, and Strong Institutions (implementing peace, justice, which was strengthened institutionally), Partnership for The Goals (realizing partnerships and synergy in order to achieve bigger goals).

The use of digital media by the Surabaya Transportation Department was in line with the goal of developing industry, innovation and infrastructure for the welfare of society. Through the use of technology, public services became more optimal and the public gets satisfaction. The use of the internet was also evidence of efforts to reduce paper use in public services. Although, traffic problems were not directly related to paper, in turn, SITS will synergize with the police department, to realize e-ticketing. This means that the elimination of traffic violations will be carried out in a paperless manner. Therefore, the policy of the Surabaya Transportation Department was in line with the issue of reducing tree cutting, which was an effort to manage land resources responsibly.

The policy of the Surabaya Transportation Department was also in line with the aspirations of creating a sustainable city and community. By utilizing current technology, the city of Surabaya and the people, can be adaptive to every era in long term period. No less important, this policy also showed the existence of partnerships and synergies in order to achieve bigger goals, such us with the police department, the private sector and state-owned enterprises.

Meanwhile, one of the basic principles of maqāṣid syari’ah, or the purpose of issuing laws / regulations, was to create the benefit for the people. Therefore, the government as the implementer of public policy must always be oriented towards justice for all society and common good (Ibnu Asyur, 2001). The existence of the SITS innovation, developed by the Surabaya Transportation Department, was in line with the idea of providing benefits to residents in the transportation sector. This policy also provided access for all people to monitor the transportation facilities real time conditions, encompassed the road and traffic conditions. In other words, there were some values of equality, fairness, usefulness, in terms of the innovation.

The SITS program was also in line with the idea of Maqāṣid al-syarī’ah al-‘ammah which focused on the public interest, in the field of transportation. There was a need for the wider community, which was manifested through this innovation. The synergy, among community exponents in the implementation of the SITS policy, was also realized. It was in line with the principle of power sharing in the implementation of public policy. Thus, the policy can run transparently, monitored, and can be accounted for (Ibnu Asyur, 1925).

In Islamic perspectives, laws and policies regarding public services needed to have three main aspects, namely, the sustainability of benefits, program clarity, and measurable policy implementation (Al-Yubi, 1988). In fact, the SITS program had been running for many years with measurable benefits. The program and activities were also structured and can be monitored by many parties, including the
Mayor of Surabaya, the Chief of the Surabaya City Transportation Service, the regional people's representative council, the mass media, and the society in general.

4. Conclusion

The utilization of digital media through the SITS program and strengthening of social media accounts, those have been done by the Surabaya Transportation Department, are forms of public services which are in line with the phenomenon of technological determination. The public services are not only regarding with direct traffic regulation on the roads, but also strengthening the role of technology to monitor traffic conditions in real time. Besides monitoring, the application also equips itself with a sensor for traffic control. It means that there are benefits that can be enjoyed directly by the community. The use of digital media as a form of information and communication technology development is also in line with the concept of maqâṣid syari’ah, as can be included in the category of efforts to protect the soul/life, protect the mind, protect property, and protect the progeny. This policy is in accordance with the principles of maqâṣid syari’ah al-‘āmmah which focuses on the public interest. In other words, in Islamic perspectives, the policy of optimization social media for traffic services has the aim of presenting the benefit or welfare for the society.

Bibliography


Sugihartati, R. (2014). *Perkembangan Masyarakat Informasi & Teori Sosial Kontemporer*. Jakarta:
Kencana.


