Utilization of Social Media in Developing Community-Based Internet on Village

Ferry Darmawan*, Dedeh Fardiah, Rini Rinawati
Faculty of Communication
Universitas Islam Bandung
Bandung, Indonesia
*ferry@unisba.ac.id

Abstract—**Todays technological sophistication is able to change the structure of interpersonal communication that was originally from face to face to mediated communication interpersonal. Community-based internet development shows that in the process of information dissemination internet development is carried out by utilizing social media. Various social media are used with the aim to get support from the government and the community. The purpose of this study is to reveal the use of social media in fulfilling information based on the theory of human motivation by Maslow. This study uses a qualitative approach using a case study with a single case study. Data collection techniques carried out by observation, study documentation, interviews, and focus group discussions. The object of research is the community internet manager in 12 regencies in West Java. The results showed that the communication media used by community internet managers in developing community-based internet is through new media. Social media as a new communication media due to technological developments can benefit the lives of people who are far from technology such as rural communities. In developing community-based internet, community internet managers use social media as a means to coordinate and interact with various parties.**

Keywords: pinter village, community internet manager, utilizing, social media

I. INTRODUCTION

The development of information and communication technology (ICT) in Indonesia is still uneven. This is due to various factors, ranging from the availability of ICT facilities and infrastructure itself to the geographical structure of Indonesia, which is an archipelago. Residents in big cities such as Jakarta, Bandung or Surabaya may already enjoy the fast internet and other latest technological advancements. However, people who live in rural areas may not necessarily enjoy the same thing. The government has an important role to ensure that ICTs are accessible to all Indonesian citizens.

The efforts of the central government through the Universal Service Obligation (USO) created the "*Desa Punya Internet (Desa Pinter)* or The Village has Internet" program which aims to build connectivity where basic telecommunications infrastructure must be developed first so that at least the village community can make phone calls and send messages. If the basic infrastructure has been built, the next step is to provide an internet connection, utilization, empowerment, and improvement of the quality of public services. Another program that utilizes the USO budget is the construction of BTS in areas that lack telecommunications facilities, to the Palapa Ring which builds fibre optic cables. To support these development goals, synergy with local governments is needed.

Previous research found that the implementation of community-based internet communication strategies for the development of the Pinter Village program in 6 (six) areas of West Java, is still experiencing obstacles both in terms of infrastructure, budgeting, and the lack of human resources in rural areas. To that end, it is necessary to increase the role of local governments, starting from villages, to districts. In addition, the role of the community is also needed, especially in developing self-ability in the IT field, so that the rapid development of ICT can be anticipated by rural communities. Therefore, the existence of community-based internet in rural areas is important [1,2].

The term ICT also refers to the presence of new media that complements traditional media. Nasrullah divides the media in a historical perspective where there is a first media age era with the broadcast format and there is a second media age era with an interactivity format, as shown in Table 1 [3].

TABLE I.   DIFFERENCES BETWEEN THE FIRST AND SECOND MEDIA ERA

The First Media Age Era (Broadcast)	The Second Media Age Era (Interactivity)
Centralized (from one source to many audiences).	Scattered (from many sources to many audiences).
Communication occurs in one direction.	Communication occurs reciprocal or bidirectional.
Opening Opportunities Sources or media to master.	Closed to master media and free to control sources.
The media is an instrument that perpetuates social class strata and inequality.	The media facilitates every audience (citizen).
The audience is fragmented and considered a mass.	The audience can be seen in accordance with the character and without leaving the diversity of their respective identities.
Media is considered that can be or a tool to influence awareness.	Media involves audience experience both in space and time.

ATLANTIS
PRESS

In new media, audiences are not merely placed as objects to be targeted by the message. The audience and media technology changes and the meaning of the medium have renewed the role of the audience to be more interactive towards messages [3,4]. Social media does change how we live. Nowadays, it is common for people to send wedding invitations in the form of photos on social media. Invitation to meetings is also often conveyed through social media. Many heads of government use social media to get up-to-date and factual information from citizens. Complain to the regent or village head, do not need to face directly, but can be done through social media accounts owned by the regent or village head [5].

The development of ICT that has penetrated rural areas to remote areas is one of the efforts to accelerate rural area development. Technology is believed to be a modifier. History proves that the evolution of technology has always occurred as a goal of efforts to obtain better facilities and benefits in the activities of people's lives. Starting from the discovery of the alphabet, until the printing press, and the invention of the telephone to the internet. Then technology has a role in social change. Changes in behaviour, lifestyle, reducing boundaries, to efficiency. Technology promises a work that is reformist, non-discriminatory, timely, measurable and clear standardization. ICT is also related to the process of democratization that occurs. The egalitarian character of information technology, in accordance with the nature of democracy. In this context, we can see rural development as part of the process of democratization of development. It is necessary to develop rural development based on creativity and for that the role of government is needed.

The public's fondness for social media breeds a phenomenon that is exploited by the business world. For example, Toyota launched its social networking site called Toyota Friends which provides the latest information on the development of its technology. In subsequent developments, social media is a concern for the interests of corporate communication activities. Now, it is increasingly common for people to promote or market their products through social media. Many small entrepreneurs use social media for their marketing strategies [5].

The presence of social media along with the development of ICTs in rural areas is an opportunity for local governments to support creative rural development programs. Especially the use of social media as a community-based internet development media. Social media involves the use of various technological tools and methods for sharing and discussing information. Social media is a way to transmit or distribute information to a broad audience where users have an opportunity to create and distribute content. For example, the online website YouTube, the video-sharing portal where users can upload, share, and view videos, is considered a social media site. Facebook was created on the premise of linking individuals and organizations into various networks of common interests or associations. In community development, one can use social media to facilitate social networking and conversely, one can network, form partnerships, and build relationships by leveraging social media [6].

Social networking sites allow users to share ideas and user-generated content (including images and video) while building connections and associations, both personal and professional. There are three fundamental uses for social networking: (1) As a means of personal communication, (2) To link groups, and (3) To promote an idea. The use of social media and networking is significant as a community development tool in terms of building relationships, improving communications, documenting development efforts, sharing information in real-time, and informing and reaching a wider audience than was possible at any time in history [6].

Based on the phenomenon of the development of social media and increasingly massive social networks, this article will describe data and facts in several rural areas in West Java based on questions: How do villagers respond to the existence of the internet network that has been provided by the government?; How does community-based internet managers empower village internet networks?; and Why was social media chosen as a medium to develop community-based internet?.

II. METHODS

This research on the utilization of social media in developing community-based internet is carried out by the case study method. Determining the type of research questions is the most important stage in case study research. Assuming that "how" and "why" questions should be the focus of research [7]. In this qualitative research method data is collected by several qualitative data collection techniques. In order to empirically examine the effectiveness of social media, the survey method was used for investigation, as this was found to be the most appropriate method to carry out a survey in order to find out the growing importance and the use of social media as a tool of communication. Observation method was also used for the present study. This technique researchers do by field research that is observing and coming directly to the object of research that can provide information about the problem being studied, this observation technique allows self-observation, taking notes and making observations on ongoing activities in this case the researcher observes by means of nonparticipant. Documentation, which is one technique for tracking secondary data, such as documents that are relevant to the Pinter Village program. Then, Focused Group Discussion to discuss research material, in an informal and relaxed atmosphere. This technique is used to reveal the meaning of a group based on the results of discussions focused on a research problem [8–12].

The subject of research is community-based internet managers covering rural areas spread across 18 districts in West Java. There are several stages of research Researchers do. Starting with initial observations to areas in West Java to determine the object of research through the agency of communication and informatics regional, as well as collecting data through the Community Empowerment and Village Administration Agency (BPMPD) of West Java Province regarding village areas that already have internet access facilitated by the government centre. Then Focus Group Discussions are conducted to uncover the meaning of a group on the object of research through comprehensive discussion so that data and facts in the field can surface.

III. Results and Discussion

A. Existence of Social Media and Citizen Participation in Rural Areas

The existence of new media has replaced traditional media. The era of communication technology has changed people's habits in communicating. It is almost certain that anyone who has a mobile phone will certainly have a social media account on their cell phones such as Facebook, Instagram, WhatsApp, and others. This condition is clearly changing the way of communication in the all-digital era. In the past, if we met new people, we would exchange business cards. Today, we would prefer to exchange WhatsApp numbers for more intense communication. Even in offices, it is common for every department to have a WhatsApp group to facilitate coordination and communication.

Likewise, village internet managers who use new media as communication media replace traditional media such as correspondence, even e-mail, as seen in Fig 1. Today, WhatsApp communication media is becoming popular in all circles. His ability to exchange information instantly, share work documents, and spread various announcements have led to increased use of the WhatsApp group. Village internet managers use WhatsApp more to communicate with district/village governments. This is due to the characteristics of its media which make communication faster, personal, and also able to share documents.
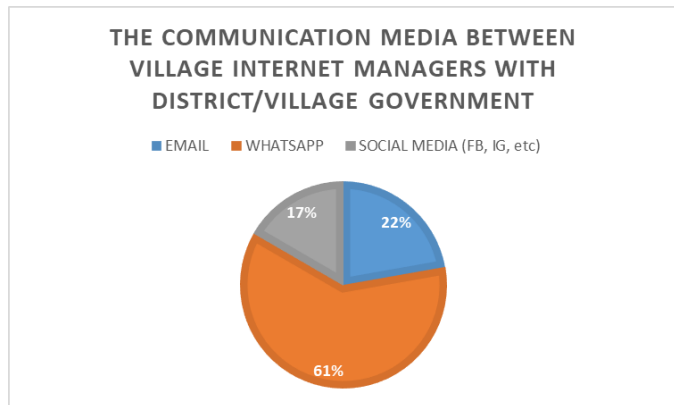

Fig. 1. New media as a media communication.

The evolution that occurred from discoveries in the field of technology and internet innovation caused not only to give birth to new media, but various aspects of human life, such as communication and interaction also experienced unexpected changes. The world seems to have no more boundaries and no more secrecy that is covered up. We can see other people's activities through social media even though we never know or meet the person [13].

The existence of an increasingly extensive internet network, allowing social media is currently a means of communication between citizens. Community involvement implies that active community participation results in interactive and real-time communication with a wide reach. The use of search engines also increases the knowledge of rural communities in increasing the potential of their regions. The information

available can be a development material and study material for the community and community practitioners. Dissemination of information also involves broad participation from the community so that sustainability dialogue can be created. The role of social media also gives birth to leadership groups that can be adapted to community goals. For example, an influential village leader creates a social media community that aims to increase the productivity of his village by sharing a variety of information that supports his region's empowerment program.

B. Village Communities Responses Toward Village Internet

Government programs in the effort of equitable development in all regions, including building infrastructure supporting internet networks to remote villages. Working closely with various internet service providers, both SOEs and private companies to minimize the impact of the digital divide, so that the acceleration of rural development can be realized. The presence of the village internet, at first did not make much difference to the village community. The village internet is used only for administrative activities in the village offices. Although hotspots are provided for villagers to access the internet, they did not use it because they did not have the devices, initially, the internet did not make any changes to the residents' behaviour. However, along with getting easier and cheaper to get a device, gradually the villagers began to access free internet at certain points that had been provided. According to village internet managers, most hotspot users are teenagers who at certain times gather to access the internet. They use it for browsing and playing social media. The presence of the internet in the village then gave rise to various responses from the community after residents started utilizing village internet access (Fig 2), among others: (1) Internet signals in the village were still weak, (2) Lack of coverage of the village internet network, (3) Some residents hoped village internet signals reach their homes so residents do not need to gather at the village office to access them.
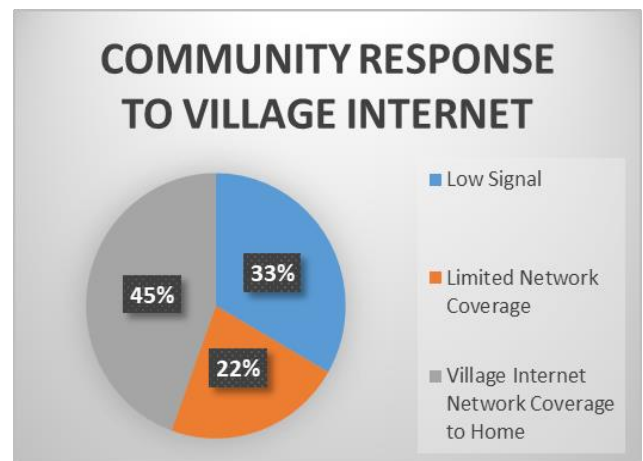

Fig. 2. Community response to village internet.

However, with the limitations of the village's internet network, villagers finally began to become internet literate. According to village internet managers, most residents access the internet for entertainment and chatting. Although the village internet network facility is used to facilitate citizens in

accessing information related to village development, there are still many villagers who prefer to come to the village office directly if there is something to be done. However, some villagers who are accustomed to accessing the internet and they have, to overcome the shortcomings of the village internet network, they choose to subscribe to the internet to available providers such as Telkomsel or XL using modems.

This phenomenon shows that existing technology and media tools have penetrated all aspects of the life of villagers, regardless of their aims and benefits. Technology has given people access to be part of a network society without demographic, social, cultural and so on [13]. However, based on research, there are several factors that encourage and preclude the community from participating in the management of smart villages. The factor that has encouraged the community to participate in the smart village program is the availability of internet network facilities and infrastructure that have entered the village. This makes the community can use the internet in their villages to find information anywhere. While the factors that prevent the public from participating are still many people who are new to new media technology. In addition, also because of the lack of level of public awareness of something that is not their field, so the education factor needs to be improved.

C. Community-Based Internet Management Efforts Empowering Village Internet

The participation of villagers in developing regional potential through ICT support is now a must. The digital age changes human habits and behaviour. The need for information makes community-based internet managers need to have a strategy in packaging content in the social media community so that the information delivered is in accordance with the needs of community members. The limitations of human resources who are experts in the field of ICT, not the least cause a less optimal use of the internet in the village. The shortage of technicians who are reliable in handling ICT infrastructure causes the existing devices to be idle longer than to be utilized. Even in some village offices, the staff cannot do much when they have problems operating existing equipment.

Most community involvement is at the level of informative participation; in which case the community has begun to utilize and receive information provided by the village. However, in its management, not many people have been directly involved. The management and involvement of the community in managing the smart village are only done by a few people and certain people.

To overcome these human resource constraints, village officials formed a community-based internet manager team whose task was to provide periodic socialization and training so that villagers could benefit more from the village's internet presence rather than entertainment. Community-based internet managers conduct training strategies for community members to improve the ability of rural communities in the IT field so that the expected goals of the Desa Pinter program can be achieved (Fig 3).

Fig. 3. Community-based internet manager strategies in enhancing HR capabilities.

Community-based internet is a program to expand village internet networks so that internet access can be wider and cheaper. The main objective is to utilize the village internet infrastructure that has been provided by the government, then to develop it by forming community groups in areas with fewer internet signals. By forming a community, members of the community can support one another because they have the same goal. Community-based internet managers are part of the village community as well. However, they have a concern about the progress of the village and the empowerment of it. Therefore, community-based internet managers often conduct counselling and training to villagers about utilizing the internet and its facilities to develop village natural resources, for example creating blogs that inform village potentials, or opening digital business opportunities such as opening online shops.
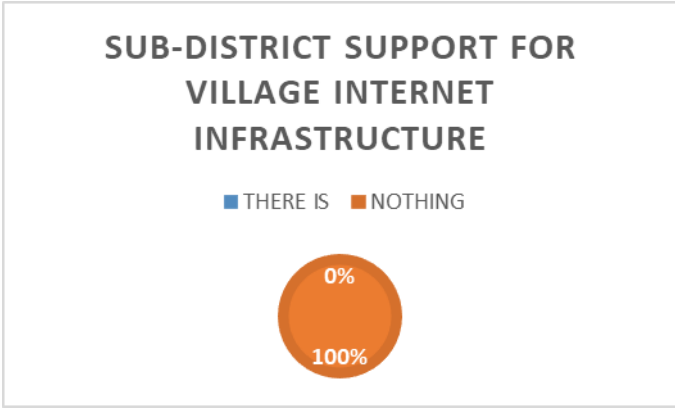

Fig. 4. Sub-district support in village internet infrastructure facilities.

The community was established to reduce the existing gaps in the village internet infrastructure. The respondent said (Fig 4) that so far, the sub-district has not provided assistance or prepared a special budget for village internet infrastructure development, so it only receives it from the central government. Meanwhile, based on the results of the questionnaire distributed to respondents, the majority complained about the quality of the village's internet network. Therefore, the existence of the community is expected among members can develop village internet technology tools so that

they are able to overcome and provide solutions to these deficiencies.

D. Social Media as a Media Developing Community-Based Internet

To conduct socialization, community-based internet managers use social media as a communication tool among villagers. Based on research, the main media used is WhatsApp, because the application has various capabilities that can be utilized by villagers such as various info in real-time, sharing files needed, or forming groups with various interesting features. The presence of WhatsApp social media has changed the habits of villagers in communication, especially media communication, because it can communicate with anyone, anytime, anywhere without being limited by time and space.

Communication with media carried out by local governments in general still uses traditional media (as opposed to new media). The telephone still dominates in media communication when coordinating. However, along with the development of internet technology, social media began to be used as a communication medium, in addition to e-mail. The village government, even more, accepts the presence of social media as a medium of communication in coordination within the institution (Figure 5).
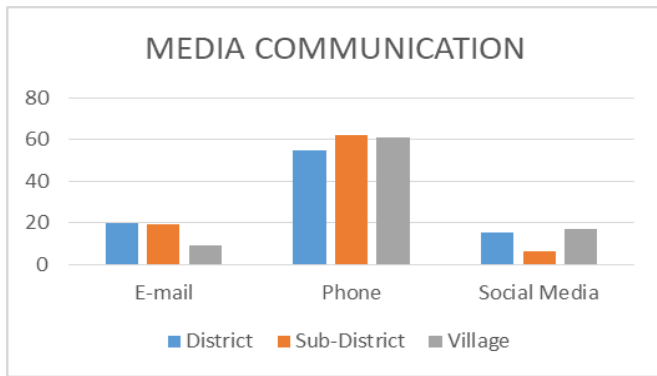

Fig. 5. Media used for communication within the institution.

This is then used by community-based internet managers to develop programs that support village development through the WhatsApp group of villagers. Many things can be done using social media [12,14], among others: (1) Communicating more easily, not bound by time and space; (2) Collaborating between users in various structured activities, such as meetings in cyberspace; (3) Sharing the latest information about the environment is more personal; up to (4) Entertainment, sharing files/media that can be accessed at any time. Many things can be done through communication with social media when compared to traditional media. The perceived benefits are reducing traditional costs such as face-to-face meetings conducted at meetings, which will inevitably add a meal, transportation and other accommodation costs. Using social media in coordination developing community-based internet, making managers more creative in developing content to be interesting for discussion by community members. In addition, problems that occur in villagers can be immediately responded by the manager to find a solution. So that citizens are also increasingly interested in developing their IT capabilities

because they do not have to wait long to solve problems if they encounter obstacles.

IV. CONCLUSION

The internet has changed human experience in communicating and collaborating. The internet has been used to access information as needed, education, marketing, politics, social, selling products, to watching television programs. Not only in the city, but also in rural areas have been entered into this internet technology with the presence of government programs on providing rural internet access. However, comprehensive socialization is needed regarding the benefits of the village internet. Constraints that occur in the village is the lack of HR experts in the IT field. In addition, the time needed to bring citizens in face-to-face socialization activities is constrained by the attitude of citizens who do not care, because the level of participation of villagers in the village internet is also still minimal. However, human nature is happy with new things. For this reason, community-based internet managers use social media, which has become increasingly prevalent in all walks of life as communication media to develop community-based internet. Social media can reach a more personal and intense audience. So that information on village internet empowerment programs can be conveyed better.

REFERENCES

[1] D. Fardiah, F. Darmawan, and R. Rinawati, "Community Based Communication Model," Proceedings of the Social and Humaniora Research Symposium (SoRes 2018), vol. 307, pp. 367–372, 2019.

[2] D. Fardiah, R. Rinawati, and O. Kurniadi, "Optimalisasi Pusat Layanan Internet Kecamatan Dalam Meningkatkan Aksesibilitas Masyarakat Terhadap Informasi," MIMBAR, vol. 30, no. 2, pp. 243–252, 2014.

[3] R. Nasrullah, Teori dan Riset Media Siber (Cybermedia). Jakarta: Kencana, 2014.

[4] S. Ramanadhan, M. Rao, S. Mendez, and K. Viswanath, "Social Media Use By Community-Based Organizations in Three Massachusetts Communities: a Content Analysis Highlighting Patterns and Opportunities," Ann. Behav. Med., vol. 45, pp. S34–S34, 2013.

[5] I.S. Ibrahim and Y. Iriantara, Komunikasi yang Mengubah Dunia. Bandung: Simbiosa Rekatama Media, 2017.

[6] P. Lachapelle, "The Use of Social Networking in Community Development," CD PRACTICE, 2011. [Online]. Retrieved from: www.comm-dev.org/index.php/publications/cd-practice%0AFor Accessed on: 12-Oct-2019.

[7] R.K. Yin, Studi Kasus (Desain dan Metode). Jakarta: Rajagrafindo Persada, 2003.

[8] I. Agusta, "Teknik Pengumpulan dan Analisis Data Kualitatif," J. Stud. Komun. dan Media, 2014.

[9] A.R. Djaelani, "Teknik Pengumpulan Data Dalam Penelitian Kualitatif," Maj. Ilm. Pawiyatan, 2013.

[10] A.R. Djaelani, Sunyono and N.P. Lestari, "Teknik Wawancara (Interview) dalam penelitian Kualitatif," Pendidik. Sains, Fak. Pascasarjana, Univ. Negeri Surabaya, 2013.

[11] S. Sugiyono, Teknik Pengumpulan Data, Metode Penelitian Kuantitatif, Kualitatif dan R&D, 2014.

[12] T.D. Baruah, "Effectiveness of Social Media as a Tool of Communication," Int. J. Sci. Res. Publ., vol. 2, no. 1, pp. 1–10, 2012.

[13] R. Nasrullah, Media Sosial - Perspektif Komunikasi, Budaya, dan Sosioteknologi. Bandung: Simbiosa Rekatama Media, 2015.

[14] T. Issa and P. Kommers, "Social networking for web-based communities," Int. J. Web Based Communities, vol. 9, no. 1, pp. 5–24, 2013.