



## The Challenges of the Digital Divide in the Online Learning Process During the COVID-19 Pandemic in Indonesia

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**ABSTRACT:** The digital divide is one of the problems faced by the government since the COVID-19 pandemic occurred. All face-to-face activities in all development sectors are transferred online. The unpreparedness of communication technology infrastructure in Indonesia is one of the obstacles to online learning activities that require a stable internet connection, even in urban areas that already have communication infrastructure with 5G networks. However, it turns out that the problem is not only with infrastructure, what is more important than that is the opportunity and ability of the community to use communication technology. In this study, researchers limit research to only discussing the challenges of the digital divide in the online learning process during the COVID-19 pandemic in Indonesia with research locations in three districts in West Java in 2020-2021. This research uses a qualitative approach, an exploratory paradigm, in a case study perspective. The data collection process was carried out under natural conditions in the form of observation, in-depth interviews and documentation studies. This study concludes that collaboration between government officials and the community has a positive impact on people's opportunities to carry out online learning processes during the COVID-19 pandemic. The challenges of the digital divide faced during the digital learning process can be partially overcome by collaboration between the government, the community and the private sector, although the approach taken is different at each research location.

**Keywords:** Digital Divide; Online; Learning Process, COVID-19 Pandemic.



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### INTRODUCTION

Since the beginning of 2020, the world has been shaken by the COVID-19 pandemic, which has spread rapidly throughout the world. As of January 29, 2022, the number of positive cases of COVID-19 worldwide has reached 372,681,713 with a death toll of 5,674,513. In Indonesia, until

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the same date, the number of positive cases reached 4,330,763 cases with the death toll reaching 144,265 people or the 16th highest in the world ([Worldometers, 2022](#)).

The COVID-19 pandemic has not only resulted in a health crisis, but also has an impact on the global economy. The economic impact of the COVID-19 pandemic began with a shock to the supply of goods and services available in the market (supply shock). The shock occurs when the majority of workers in the production chain become infected with the virus and then get sick. This condition causes a decrease in the level of productivity of individuals or companies. Shocks to supply were also driven by physical activity restrictions (physical distancing) or the implementation of Community Activity Restrictions (PPKM) as part of efforts to control the spread of the pandemic. The two policies resulted in many factories, offices and business centers being temporarily closed ([Dewi & Sunarta, 2021](#); [Pujaningsih & Sucitawathi, 2020](#)).

Since the first month of handling the COVID-19 pandemic in Indonesia, the Indonesian government has issued a policy to work and study online through the use of communication technology as an effort to inhibit the transmission of the COVID-19 virus by moving face-to-face meetings to online through the use of live streaming applications. This policy has encountered obstacles in its implementation because not all regions of the archipelago have adequate communication technology infrastructure networks, even on the island of Java, there are still rural areas that are not covered by cellular phone signals or blank spots ([Muhajir, 2020](#); [Sainuddin, 2020](#)).

Barriers to work and study online are not limited to the infrastructure aspect. Community skills or expertise in optimally utilizing the latest communication technology, such as the 5G network which is becoming available in several big cities, is an obstacle in implementing policies for working and studying online during the current COVID-19 pandemic. Most people still stutter about the use of the internet network to support learning, because so far the internet is more synonymous with social media which tends to be used as a mere entertainment tool to replace electronic media and print media ([Arrochmah & Nasionalita, 2020](#); [Hadiono & Santi, 2020](#)).

To measure the progress of information and communication technology in a region, the Ministry of Communication and Information (Kemenkominfo) uses the Information and Communication Technology Development Index (IP-TIK) which consists of three sub-indices, namely the infrastructure sub-index, usage sub-index, and expertise sub-index. This IP-TIK uses a scale of 0–10, where a scale of 10 indicates a perfect score, on the contrary a value of 0 indicates that there is no ICT development in the area, meaning that the faster ICT development in an area, the higher the score will be. On the other hand, a lower index value means that ICT development in the area is still slow. The national IP-TIK at the end of 2020 reached 5.59 points, an increase of 0.27 points or 5.07 percent compared to the national IP-TIK in 2019 of 5.32 points. If viewed based on the sub-index, the access and ICT infrastructure sub-index reached 5.67 points, the usage sub-index reached 5.34 points, and the expertise sub-index reached 5.92 points. IP-TIK at the provincial level in Indonesia in general has increased. The province with the highest IP-TIK in Indonesia in 2020 is DKI Jakarta, with an IPT-TIK score of

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7.46 points, while the province with the lowest IP-TIK is Papua Province, with a value of 3.35 points. West Java Province has IP-TIK 6.0 and is in 6th place, under DKI Jakarta Province, D.I. Yogyakarta, Bali, Riau Islands and East Kalimantan ([Biro Pusat Statistik, 2021](#)).

Out of 5,312 sub-districts and villages throughout the province of West Java, there are 5,225 villages (87.9%) that have been served by the 4G/LTE communication network. A total of 671 villages are still using the 3G/H/H+/EVDO network, while 43 new villages are served by the 2.5G/EDGE/GPRS network. Until the end of 2020, there are still 5 (five) villages in West Java that have not been served by a cellular communication signal network at all or (blank spots). Of the five villages, 3 (three) villages are located in Tasikmalaya Regency, 1 (one) village in Kuningan Regency, and 1 (one) village in Sukabumi Regency ([Biro Pusat Statistik, 2021](#)).

Although the infrastructure is relatively adequate, the facts on the ground show that online work and learning activities are experiencing problems in 60 villages in West Java which are still served by 2.5G/EDGE/GPRS and 3G/H/H+/EVDO networks. As is known, to be able to use live-streaming applications smoothly requires a stable 4G/LTE network. People living in urban areas n even though they still complain about the connection that is often lost when using live-streaming applications for work or online study. The number of users who are very dense during working hours also affects the quality of service. The problem of the digital divide in Indonesia is not only a problem with communication technology infrastructure, but further than that it is a social and cultural communication problem for people in Indonesia who have not yet formed an information society with an adequate level of media literacy ([Puspitasari & Ishii, 2016](#); [Wang et al., 2021](#)).

The concept of community empowerment communication is a development communication strategy that is rooted in the populist aspect and starts from a philosophy that every human being, every society, has power and potential that can be developed. That is, no society is completely powerless. Empowerment is an effort to build that power, by encouraging, motivating, and raising awareness of its potential and trying to develop it. These efforts must be followed by strengthening the potential or power of the community. Empowerment does not only include strengthening individual community members, but also existing social institutions, namely instilling positive values such as mutual cooperation, hard work, honesty, openness, responsibility, integrity, justice, and a big heart. Thus, the process of community empowerment does not only raise the economic status of the community, but also raises their dignity and self-worth ([Suwana & Lily, 2017](#); [Văidean & Achim, 2021](#)).

Community empowerment in development must at least meet four main elements, namely community-centered (people-centered), involving all levels of society (participatory), real empowerment (empowering), and sustainable (sustainable). Community empowerment communication seen from its form can be in the form of journalistic coverage activities, policy socialization, or counseling and training of development programs. So, the concept of community empowerment communication is an effort to improve the welfare and dignity of the

community by unraveling the root of the problem and providing solutions through appropriate communication strategies ([Ataöv et al., 2021](#); [Luisi & Hämel, 2021](#); [Schauffel et al., 2021](#))

The problem of the digital divide that has occurred so far has always tried to be resolved through a large-scale communication technology infrastructure approach. However, infrastructure is not the only way to build an information society. The concept of the digital divide today comes from a report by one of the United States government agencies in the field of telecommunications and information, named the National Telecommunication and Information Administration (NTIA) in 2010. The report classifies American citizens into two major technological groups, namely people who have access to and do not have access to information and communication technology (ICT) services, both government and private services ([Kearns & Whitley, 2020](#); [Torkayesh & Torkayesh, 2021](#))

The digital divide is not only related to infrastructure access. The digital divide is also related to the ideological, political, economic, social, cultural, geographical, and demographic gaps. The problem of inequality will continue to accompany the development of communication technology, especially for developing countries, the digital divide is an obstacle to development. Even though until now developed industrial countries have not been able to solve this technology gap problem, although the percentage is not as much as in developing countries, because they are still facing inequality problems in various sectors of life ([Zhang et al., 2020](#)).

The problem of the digital divide has become increasingly complicated during the Covid-19 pandemic, where the process of working and learning requires a stable communication technology network connection. Even in the early stages of the pandemic, working and studying online was very inconvenient and even confusing, whereas in terms of infrastructure, communication service networks, such as in urban areas, were sufficient. It may take several months before workers and students become comfortable with the shift from face-to-face to online activities. On the other hand, in areas where there are no adequate communication technology services, such as teachers in remote schools, they have stated that they are unable to teach their students online, because to get a signal they have to go to the sub-district capital, which is tens of kilometers away ([Aryadoust, 2020](#); [Summers et al., 2020](#)).

Another issue is regarding the mandatory COVID-19 vaccination which is proven through the PeduliLindungi application as a condition for the community to carry out activities where the whole process requires adequate networks, devices, and expertise to be able to utilize it optimally. It is not surprising that various problems arise in the implementation of the policy, because not all people have access to information, internet service, have the proper tools, or have the necessary skills to use them ([Afiana et al., 2020](#); [Herdiana, 2021](#)).

From the explanation above, it is considered important to research various efforts to overcome various problems related to the Digital Gap through the Communication Approach for Community Empowerment during the COVID-19 Pandemic, especially in West Java Province. The research location was chosen because of the high level of digital divide even though the

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province is located not far from the national capital, which is the center of advances in communication technology. In this study, researchers limit research to only discussing efforts to overcome the Digital Gap through the Communication Approach for Community Empowerment during the COVID-19 Pandemic with research locations in three districts in West Java during the Covid 19 pandemic throughout 2020-2021.

## METHOD

This research uses a qualitative approach, an exploratory paradigm, in a case study perspective. Qualitative research, flexible and open with an emphasis on inductive analysis. This type of research uses descriptive research because this research is a way to examine the status of a group, a person, an object, a set of conditions, a system of thought, or a class of events in the present ([Rony, 2017](#)).

This research will examine aspects of community empowerment communication used in an effort to overcome the digital divide during the COVID-19 pandemic, what are the factors that support and hinder efforts to overcome the digital divide, as well as the efforts made to minimize the inhibiting factors. In accordance with the research methods and approaches used, the data collection process carried out in natural settings refers to participant observation, in-depth interviews and documentation. ([Abdullah & Permana, 2021](#))

## RESULTS AND DISCUSSION

The digital divide is a condition where there is a gap in society regarding knowledge and also the ability to access all forms of information and communication technology. The digital divide remains a problem even in developed countries where the majority of people already understand the use and utilization of technology. In third world countries, especially Indonesia, the digital divide in society can certainly be felt. The number of news that has emerged regarding areas of Indonesia that are still untouched by internet access or how residents of remote areas deal with distance learning with improvised technology can certainly be a step back for Indonesia, which is preparing to face the Industrial Revolution 4.0 and the Era of Society 5.0 ([Mon & Del Giorgio, 2021](#)).

Based on data from the Central Statistics Agency in 2020, it is stated that the average internet use in urban areas is 72%, but in rural areas it is only around 40%. The digital divide in Indonesia can be seen in the ability of households to own technology devices, there are data showing that no more than 20% of households in rural areas own a computer. In addition, it is known that the internet speed in Jakarta, which already has 5G internet service, is 20 times faster than in cities in Eastern Indonesia, such as Manokwari and Jayapura, which only have an average speed of 256 Kbps ([Puspitasari & Ishii, 2016](#)).

The facts on the ground show that there is a gap in access to information and communication technology in Indonesia. The development of technology infrastructure is still concentrated in big cities. This certainly complicates the penetration of digital information to the Indonesian people



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evenly. This makes rural communities hampered in receiving information quickly and evenly like residents in urban areas. Until now, there are still some areas in Indonesia where it is still difficult to get internet signal with 2G or 3G quality though ([Zheng & Wang, 2021](#)).

The next problem is the low digital literacy of the Indonesian people compared to other countries in the world that already have 4G/LTE services, where Indonesia is ranked 56th out of 63 countries in the world. In fact, the media literacy level of Indonesian society is lower than neighboring countries such as Singapore, Malaysia, Thailand, the Philippines, Vietnam and Brunei Darussalam. Indonesia is only above Myanmar, Cambodia, Laos and Timor Leste. The low media literacy in Indonesia is partly due to the low reading interest of the Indonesian people, so that more than 45% of Indonesians only use the internet for conversation and entertainment through social media ([Gnambs, 2021](#)).

The government is of course aware that Indonesia is lagging behind in terms of digital media literacy, and many efforts have been made by the government to address the issue of the digital divide in Indonesia. The Ministry of Communication and Information (Kemenkominfo) has carried out the construction of communication technology infrastructure as an effort to improve the welfare of the community for access to information and communication technology. The Ministry of Industry and the Ministry of Communication and Information have issued the Making Indonesia 4.0 program with the aim of increasing the potential and capabilities of human resources. However, instead of addressing the digital divide in Indonesia and meeting the infrastructure and facilities needed by the community, this program only focuses on developing digital businesses ([Dida et al., 2021](#)).

The government, society, and business people currently rely heavily on internet connections due to limited activities during the current COVID-19 pandemic. Meeting food needs, working online and doing distance learning for urban communities are certainly easy things. However, this is not the case for people in rural areas who do not have adequate infrastructure to support distance learning and other online activities. This fact shows that the efforts that have been made by the government have not yielded enough results in eradicating the digital divide in Indonesia. The three sub-indices of communication technology development show unequal numbers between urban and rural areas, or provinces with a dense population and a province with a sparse population ([Edwards, 2019](#); [Kearns & Whitley, 2020](#)).

The digital divide occurs because so far the provision of access and infrastructure has prioritized urban areas, because building communication technology infrastructure requires large amounts of funds. Finally, the government handed over infrastructure development to cellular phone operators in Indonesia. Although currently the largest cellular operator in Indonesia is a State-Owned Enterprise (BUMN) most of whose shares are owned by the Government, as a business entity, of course, considering the business aspect or profit from the costs incurred to build communication technology infrastructure.

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In addition, companies must share frequencies with several private telecommunications operator companies, so that not the entire archipelago of the archipelago is served by government-owned telecommunications operators. Such conditions also hinder efforts to address the digital divide in Indonesia. This happened in Citapen Village, Japara District, which is one of the blank spot villages in Kuningan Regency. In that village, the nearest cellular communication signal is 1 kilometer from the village boundary, so people have to walk that far to get a signal from a private cellular operator. One research informant, a resident of Citapen Village, who works as an elementary school teacher in Japara District, told of his difficulty communicating when he returned home after work. Because there is no signal in his village, he is forced to often delay returning home until the afternoon so that he can keep in touch with his students online. When he is at home, he often asks for help from his brother in a neighboring village to let him know if there is an important message from his place of work. This condition has occurred for a dozen years since cellular communication existed in Indonesia. It's ironic considering the location of the village where he lives is only a dozen kilometers from the capital of Kuningan Regency.

A more concerning condition is experienced by the residents of Kampung Sukasirna, Nangela Village, Tegalbuleud District, Sukabumi Regency, who until now have not enjoyed electricity network services from PT. Perusahaan Listrik Negara (PLN) is the only company that distributes electricity throughout the archipelago. The only source of electricity available is a 30 year old solar panel that provides electricity for only five hours at night. Very poor road infrastructure leading to the village location makes the village, which is located six hours away from Sukabumi City, as if isolated from outside life. The people in the village have never experienced any cellular communication technology services for a dozen years. Cellular operators have thought thousands of times to build a communication infrastructure network to the village, because of course it is not economically and business profitable.

Different conditions are experienced by people in Muncang Village, Sodonghilir District, Tasikmalaya Regency. There is electricity in this village, but for some reason the telecommunication signal does not reach this village. According to the head of Muncang village, the reason is the remote location of the village far from the sub-district capital as well as geographical conditions and difficult road terrain, making cellular telecommunications operators reluctant to build communication infrastructure in the village. The geographical condition of the West Java Province which is dominated by highlands and mountains is the main inhibiting factor that makes the development of communication infrastructure impossible.

During the current COVID-19 pandemic, the condition of communication infrastructure that has not been evenly developed in all areas of West Java Province, of course, is a separate obstacle for the implementation of online work and study activities. To overcome this, local village government officials are looking for ways so that distance learning activities can continue to be carried out properly. Each village has its own way of dealing with these problems, because after all the policies of working and distance learning must continue to be implemented during the COVID-19 pandemic.

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The Kuningan Regency Government in collaboration with a cellular telecommunications operator provides Mobile BTS, which is a signal receiving and transmitting device installed in four-wheeled vehicles, during school and work hours, so that the entire community and students can use it to carry out work and study activities. online. Every morning until noon the vehicle is in the Citapen village office yard so that students can use it to study online. To empower the community's economy, the Citapen village government has also formed several Joint Business Groups (KUB) consisting of micro and small business actors who can use an internet connection to market their products online. These business actors have several different types of businesses, including processed food, handicrafts, and plant cultivation. Despite all the existing limitations, the existence of Mobile BTS is enough to help residents, especially students and business people, to carry out work, business and online learning activities. In the future, they hope to be able to enjoy internet service 24 hours a day, and not only during the day like today.

If in Kuningan Regency the problem of the existing digital divide can be temporarily resolved by bringing in a signal-transmitting vehicle, then this is something that is impossible to happen in Sukasirna Village, Nangela Village, Tegalbuleud District, Sukabumi Regency, because there is no electricity in the village during the day. With this condition, the village apparatus then took the initiative to continue to carry out work and study activities face-to-face but by implementing strict health protocols..

For village administrations that have a small number of village officials, of course this will not be a problem, where working hours are divided into several shifts, so that there are no crowds at the village office. Furthermore, for online learning activities, the village government and school principals adopt a policy of studying at students' homes. If a class consists of 20 people, then it is divided into four groups of five students each. Later the teachers will come to the study groups to provide the subject matter. So far, this is the only way the learning process can be carried out, although not online, due to the absence of electricity and telecommunications networks in the village.

Meanwhile, the Muncang Village government, Sodonghilir sub-district, through the Tasikmalaya Regency Government took the initiative to apply for telecommunication infrastructure development assistance to the West Java Provincial Government. At the end of 2020, the Deputy Governor of West Java Province, Uu Ruzhanul Ulum, who is a former Regent of Tasikmalaya immediately visited the location and stated that he would build communication infrastructure in the village. In mid-2021, through the Internet Champion program in collaboration with the West Java Provincial Government with the Ministry of Communication and Information, and Telkom's CSR, a communication network has been built in the village. In addition to building a telecommunications network, the West Java Provincial Government also provided a grant in the form of several computer equipment complete with a modem and a LAN cable network to the Head of Muncang Village.

The construction of a communication network and computer assistance that can access the internet is very helpful for the people of Muncang Village, who have been isolated from the



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outside world. Through the Internet Champion program, the West Java Provincial Government in addition to providing assistance in the form of access and infrastructure also provides skills training to villagers who have businesses so that they can market their products online.

The entrepreneurship training consists of three aspects, namely Production aspects, Management aspects, and Marketing aspects. If so far they have only marketed their products around the Tasikmalaya Regency area, now they can market their products through their personal websites (pages) or through marketplaces, such as Tokopedia and others. They also receive business marketing training through social media such as Whatsapp, Facebook, Instagram, Twitter, and YouTube.

From the problem of the absence of a communication technology network in three different locations in West Java Province, each village has a different solution so that it gives different results. In Kuningan Regency, the solution provided by the village government is only temporary, where the internet network is only available during the day through the Mobile BTS or Mobile Transmitter service. Meanwhile, at night they again cannot enjoy telecommunication network services. The solution provided by the government in the case in Kuningan Regency is only temporary, and more specifically it is only available during working hours and days, namely Monday to Friday from eight in the morning to four in the afternoon. On weekends or Saturdays and Sundays, the telecommunications network remains unavailable in the village.

In the case of the absence of a signal in Nangelang Village, Sukabumi Regency, the communication technology infrastructure problem even reached a dead end and did not get the best solution, due to the absence of electricity in the village. The road infrastructure is very bad and the distance is very long, making efforts to provide communication technology infrastructure very expensive and no cellular operator can afford to build it. The main problem lies in the absence of an electricity network from PLN to the village, so that the provision of communication technology services that rely heavily on electricity supply is almost impossible. Elementary school students in the village were forced to continue to carry out face-to-face learning activities even though the implementation was shifted to students' homes, where elementary school teachers visited study groups of five students alternately twice a week.

A different approach was taken by the Tasikmalaya Regency Government in overcoming infrastructure problems in Muncang Village, Sodonghilir District, which for years had never enjoyed communication technology services. The West Java Provincial Government through the Internet Champion program provides a complete solution to the problems faced through three concrete steps, namely by building a communication technology network, providing hardware grants to access the internet network, and providing online marketing training to the community of micro and small business actors. who already have a marketable product. The Internet Champion Program uses a community empowerment communication strategy approach that is implemented appropriately in overcoming the problem of the digital divide during the current pandemic. The solution provided by the West Java Provincial Government has proven to be able to improve the economy of the Muncang Village community by providing access to

communication technology that is much needed by micro and small business actors who have difficulty marketing their products during the COVID-19 pandemic.

There are several factors causing the digital divide in rural areas. The first factor is the poverty factor, where rural residents are unable to buy the technological devices needed to access the available communication technology services, where only 20 percent of the rural population have the necessary equipment in the form of computers, laptops or cell phones to access technology network services. Communication ([Salehan et al., 2018](#)).

The second factor is the lack of knowledge and skills needed by the community to be able to use communication technology services. This means that not all villagers who have communication devices can use them properly. One of the misconceptions that occurs in most rural residents is that they think that the internet is social media and social media is the internet. They do not know how to send letters via email, or how to upload (upload) and download (download) documents through cloud applications (cloud computing). On the other hand, they understand well how to create and update statuses on social media, such as Whatsapp and Facebook. This is of course a concern where telecommunications network services are only used for chatting or sharing funny photos and videos as a mere entertainment tool. (Aryanti, 2013).

One of the factors causing this was the low level of education of rural communities. More than 60 percent of rural people only have an elementary school diploma (SD), 20 percent have a junior high school diploma (SMP), and only 10 percent have a high school diploma (SMA). Meanwhile, the number of village residents with a bachelor's degree is less than five percent. This of course causes the majority of rural communities do not have the ability to utilize communication technology services optimally. Even they are confused about how to use a device that has an internet connection. Rural people for the most part do not understand what they will be looking for and what they can get through the internet. ([Dida et al., 2021](#))

The third factor is the absence of communication technology network infrastructure. This is the most common thing and is the cause of the digital divide in the country. The geographical condition of Indonesia, which consists of thousands of islands, requires expensive investments to build a communication technology network capable of connecting all regions in 34 provinces in the archipelago. The best solution is that Indonesia must have its own communications satellite that specifically serves the telecommunications access of the Indonesian people from Sabang to Merauke. However, satellite alone is not enough. To get quality 4G/LTE services using fiber optic cables, the Government must build a marine cable network that connects thousands of islands in the Archipelago. Until now, a submarine cable network is available connecting the island of Java with the islands of Sumatra, Kalimantan, Sulawesi and the islands of Bali and West Nusa Tenggara. Meanwhile, the submarine cable network to the East Nusa Tenggara, Maluku Islands and Papua is still under construction ([Puspitasari & Ishii, 2016](#)).

Several provinces outside Java, such as Bali, Riau and East Kalimantan provinces, have very rapid development of communication technology infrastructure, even being able to beat several

provinces on the island of Java, such as West Java, East Java, Central Java and Banten. Meanwhile, DKI Jakarta Province and the Special Region of Yogyakarta are still the two best provinces in terms of providing access to services and communication technology infrastructure. The coverage of the communication technology infrastructure network in the two provinces has reached 100%, so there are no more blank spots. Meanwhile, the other four provinces on the island of Java are still facing geographical constraints in building infrastructure throughout the province ([Arrochmah & Nasionalita, 2020](#)).

## CONCLUSION

The digital divide that occurs in Indonesia has become a challenge in itself during the current COVID-19 pandemic, where all learning activities are carried out online, but access and communication technology infrastructure are not evenly distributed. In addition to the access factor and communication technology infrastructure, the poverty factor and the skill factor of human resources in rural areas are also obstacles in carrying out online activities during the current COVID-19 pandemic.

In the province of West Java, there are five villages that have not experienced communication technology services for years due to the lack of access and communication technology infrastructure networks in these villages. The village government has tried to find a solution to overcome these problems. In Sukabumi Regency, the construction of a communication technology infrastructure network is constrained by the absence of an electricity network in the village. Meanwhile in Kuningan Regency, communication technology network infrastructure problems were overcome by bringing in Mobile BTS services or mobile transmitters that provide services five days a week, so that the online learning process can take place from Monday to Friday.

The best solution is carried out by the West Java Government to overcome the digital divide that occurs in Tasikmalaya Regency through the Internet Champion Program. Through this program, the West Java Provincial Government, in collaboration with the Ministry of Communication and Information and PT Telkomsel, did three main things, namely building a communication technology infrastructure network, providing grants for computer equipment and LAN networks to access the internet and providing entrepreneurship training to the community. The impact felt by the community, besides being able to carry out online learning activities smoothly, the community's economy has also increased. Of course, this success can also be implemented in other rural areas in Indonesia which are still experiencing the digital divide and do not have access to communication technology.

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