

## APPLICATION OF TECHNOLOGY IN RURAL ENVIRONMENT IN THE PANDEMY PERIOD

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### ABSTRACT

The COVID-19 pandemic is changing the way of life and the way of thinking of all people. Since the pandemic began in December 2019, the whole world has begun to self-isolate, following WHO and government recommendations to implement strict health protocols. The impact of this protocol is very broad and affects the world economy. On the other hand, the application of technology has become very massive, digitalization touches almost all aspects of life at every level of society. The limitations of mobilization and activities have triggered many new platforms to grow to accommodate these limitations, all of which are done to keep people maintaining health protocols while still meeting their daily needs. People in urban areas adapt more quickly to digital changes that occur, of course, because of the environment and supporting infrastructure. This research raises the topic of the aspects of digitizing processes in rural areas in the pandemic era and how the application of technology brings changes and impacts in the lives of people in rural areas.

**Keywords:** digital changes, pandemy, rural area, application of technology

### INTRODUCTION

The COVID-19 pandemic is changing the way of life and the way of thinking of all people. Since the pandemic began in December 2019, the whole world has begun to self-isolate, following WHO and government recommendations to implement strict health protocols. The impact of this protocol is very broad and affects the world economy.

The development of Covid-19 has now spread in various countries and has spread across 190 countries. The level of spread and positivity of Covid-19 is increasing so that many countries use technology to mitigate and monitor the spread of covid-19.

To reduce the spread of governments in various countries implementing social policies distancing or the term physical distancing is often used, namely non-pharmaceutical policies to prevent the spread of the plague by keeping a distance between each individual and reduce the frequency of meetings between them. Many countries take

advantage of technology to be able to find out the effectiveness of the policy in question. With developments technology and information in the world of health, it is possible to obtain all information remotely using internet media. Internet convenience help the patient relationship with the doctor, see what to do in the state of the covid-19 virus pandemic online, checking the number of people who have been infected, who have been saved and how to correct prevention against the virus.

Lampung Province is no exception, since February 2020 the local government has decided to limit activities, mobilization and crowds until now. Even though the new normal concept has been echoed for some time, we can see that the economy has not yet recovered, many business sectors have had to go out of business or change their business concept due to the Health protocol.

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levels of society. The limitations of mobilization and activities have triggered many new platforms to grow to accommodate these limitations, all of which are done to keep people maintaining health protocols while still meeting their daily needs.

The role of technology is also involved in all of our daily activities. With the implementation of interaction restrictions, people will depend more on their gadgets. Activities daily, entertainment, relationships social, to the needs of the logistics can be easily accessible via gadget respectively. Perhaps the role of technology in the social sphere was often used even before the existence of social restrictions policies. However, with conditions like this, plus the regulation of restrictions of social, then the role of technology to socialize will be felt. (Kurniawan, 2020)

Some other platforms or applications that have long offered digitization of processes such as ordering daily household products, online bill payments, online sales, online learning assistance, data collection and so on have become main features, even though before the pandemic these features were not main features.

People in urban areas adapt more quickly to digital changes that occur, of course, because of the environment and supporting infrastructure. This research raises the topic of the aspects of digitizing processes in rural areas in the pandemic era and how the application of technology brings changes and impacts in the lives of people in rural areas.

Researchers conducted research in 5 districts in Lampung province related to the application of technology in this pandemic era, these areas are:

1. Center Lampung district (Trimurjo sub-district)
2. East Lampung district (Bumi Ratu Nuban Sub-District)
3. North Lampung District (Palas Sub-District)

4. Way Kanan district (Buay Bahuga sub-district)
5. Tanggamus district (Ulu Belu Sub-District)

## RESEARCH METHOD

This study used a descriptive qualitative method, where the researcher used observation and interviews as the main data collection methods and then analyzed inductively. The qualitative form chosen is descriptive research which is a research method that describes all data or the state of the subject or research object being analyzed and compared based on ongoing reality (Hashim 2020). This research is focused on facts related to activities related to information technology in fighting the COVID-19 virus pandemic. Spradley (in Sugiyono, 2009) revealed that in the research Qualitative do not use the term population, but the so-called social situation which is composed of three elements namely the place, actors and activity that interacts with synergistic

In this study the research team visited the area that was the research location, conducted interviews and educated the public about the use of several applications related to COVID-19 and digital activities, then returned to the location after 2 months of running and returned to conduct interviews related to the use of technology and its role in assisting residents' activities during activity restrictions during a pandemic

## FINDINGS AND DISCUSSION THE TYPE OF APPLICATION OR PLATFORM APPLIED

Researchers divide the application of information technology into two types, namely:

### 1. Technology Information to Obtain or Disseminate Information

Applications or platforms that are introduced to rural communities that used for

socialization and increasing knowledge of the general public about COVID-19 such as:

- a) News portal
- b) The official social media for the health office and the provincial government
- c) Jaga Jarak application to detect COVID-19 patients

Besides introducing and do mentoring application of technology information team also educate rural residents to remain critical in reading an information, ease of dissemination of information does not cover the wide range of possibilities for the spread of information negatively about the pandemic COVID-19.

## 2. Technology Information to Assist the Daily Activities

Application or platform which can replace the activity of a routine that requires people to gather and swarm like:

- a) E-commerce for ordering daily product
- b) Online billing payment
- c) Online learning assistance
- d) Digital meeting room

## IMPLEMENTATION AND MENTORING MODELS

Implementation and mentoring done by a team of researchers are grouped by age. The first group is adult, applications or platforms that are taught are:

1. News portal
2. The official social media for the health office and the provincial government
3. Jaga Jarak application to detect COVID-19 patients
4. E-commerce for ordering daily product
5. Online billing payment
6. Digital meeting room

The second group is student from 7 years old to 18 years old, the application or platform being taught is:

1. Online learning application
2. Digital meeting room

Mentoring is done for 3 times in August 2020 to teach the functions of applications, benefits and manual

instructions. After two months a team of researchers came back to do the observation of the changes in behavior and way of thinking of rural residents.

There are two ratings are used to study this, the first is the intensity of use since introduced until the time of evaluation which lasted for two months, the second is the willingness to use technology information again in the following months while a pandemic is still going. The parameters used are high, medium and low with the provisions as follows:

Intensity of use	
High	Use the application >10 times/month
Moderate	Use the application 5 to 10 times a month
Low	Use of the application < 5 times a month
Kesediaan untuk menggunakan kembali	
High	Use the application for most daily activities
Moderate	Use the application for some daily activities
Low	Use the application only in urgent condition or not at all

## OBSERVATION RESULTS

From the results of observation were conducted on 5 districts in the province of Lampung obtained the results as follows:

No	District	The Intensity to use digital app		Willingness to use	
		A	S	A	S
1	Center Lampung	H	L	L	L

2	East Lampung	L	L	L	M
3	North Lampung	M	M	H	H
4	Way Kanan	L	L	L	L
5	Tanggamus	L	L	L	L

From the data above can be seen that the location which is in close to the city has the intensity of use of the application are higher than the location which is far away from the center of town, the main factor is the internet network on the location and age of the users . According to data collected by a team of researchers areas that are far from the center of the city tend to be low in intensity and willingness to use the application digital, the case is rural residents believe that the more remote location of the village from the center of town is getting little likelihood of contracting covid-19 so that the community village is more like using the services public are available in the near area.

The age of the participants also affects their habit of using digital applications. Participants at the age of schools ranging from seven years old to eighteen years old more adaptive and has high willingness to use the digital application, however most of the participants do not have the gadget itself or have a gadget with a limited specification, that cause the rate of willingness to keep using the application of digital to be low.

Policy of the government to carry out activities of learning a teaching in online influence the intensity of use of the application of digital at participants aged school. Can be seen in table results that the use of the application of digital in the south lampung district being moderate , matter is due parts of implementing online school while other districts that are still applying the face-to- face model appears to have low intensity in the use of digital application

In general the people of rural understand the functions and benefits of the use of the application of digital to support their daily activities, but the limitations that exist around them make the society villagers are not able to utilize the advantage at its best.

## CONCLUSION

The role of information technology is very helpful for the community in preventing the COVID-19 virus to spread. In new normal conditions with various limitations on existing health protocols, technology can be the answer for various activities. The government, state-owned enterprises and startups are competing to build applications or systems that can help community activities by continuing to carry out health protocols, this of course not only helps during a pandemic but also changes people's behavior and ways of working, both in the city and in the village. .

The next problem that arises is that the infrastructure and condition of rural communities still have various limitations, such as:

1. Network infrastructure
2. Location far from city center
3. The ability to use gadgets is still low
4. The types of gadgets are not up-to-date

So that the village community prefers to continue doing activities as usual even though these activities require them to travel and meet many people, even join the crowd.

In general, village communities who have been introduced and assisted in implementing information technology feel helped by existing applications, it's just that they still have some unsolved limitations.

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