

Adaptation and Diffusion of Technological Innovations in the Kesepuhan Ciptagelar Indigenous Community of West Java

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Abstract

This research examines the adaptation and diffusion of technological innovation in the Kesepuhan Ciptagelar Indigenous Community. This study aims to determine the diffusion process of technological innovation and the role of Kesepuhan in Ciptagelar in encouraging the application of technology by the needs and customary norms there. The descriptive qualitative method was used to describe the process of innovation diffusion in the application and development of technology in Cipta Gelar Kesepuhan. M. Rogers' innovation diffusion theory is the basis of analysis in this research which has four main elements in the innovation diffusion process: innovation, communication channels, time, and social systems. The research results show that the Ciptagelar Kesepuhan has considered the four main elements of innovation diffusion in encouraging technological adaptation and development. The Ciptagelar Kesepuhan uses a strategy that maximizes the use of the opinion of the leader, namely the Chief Adat, who is assisted hierarchically by the leadership structure there. Community media (CIGA TV and Radio Swarsa Cipta Gelar) and grand deliberations in Ciptagelar are also used as interpersonal communication utilized for communication channels. Those messages are also processed by considering the characteristics of an innovation. The obstacles in adapting innovations or technology depend on the need for benefits and compatibility with customary norms as the basis for applying technology in Kesepuhan Ciptagelar.

Keywords: Adaptation, Diffusion of Innovation, Technology, Indigenous Peoples, Kesepuhan Ciptagelar

1. Introduction

The term indigenous peoples is not an unfamiliar one. According to the Indigenous Peoples Alliance of the Archipelago (AMAN), Indigenous peoples are groups of people who have a history of origin and have inhabited customary territories for generations, have sovereignty over land and natural resources, socio-cultural life is governed by customary law, and have customary institutions that are tasked with maintaining the continuity of life as indigenous peoples (Yulaswati et al., 2013). Four elements of tradition or ancestral heritage distinguish Indigenous Peoples from other communities: 1) a common cultural identity including language, spirituality,

values, attitudes and behaviors that distinguish one social group from another; 2) a value and knowledge system that includes traditional knowledge in the form of traditional medicine, traditional agriculture, traditional games, traditional schools, and traditional forms of knowledge and innovation; 3) Customary territories which include land, forests, seas and natural resources (SDA), this is not seen only in production goods (economic goods) but also the religious and socio-cultural systems that exist in the community; and 4) customary law and customary institutions, rules and management of living together to regulate and manage themselves as a social, cultural, economic and political group (Dalidjo, 2021).

Indonesia is a country with a high population of indigenous peoples. Data from DataIndonesia.id As of August 9, 2023, there are around 4.7 million indigenous peoples in Indonesia. Of that number, 1.4 million Indigenous people are in Kalimantan, 1.27 are in Sumatra, and 1.05 million Indigenous people are in Sulawesi. Meanwhile, 302,799 indigenous people are located in Bali and Nusa Tenggara. Meanwhile, there are 285,728 indigenous people in Maluku. There are also 250,115 indigenous people living in Java. Meanwhile, the number of indigenous people in Papua was observed at 10,543. According to their gender, as many as 2.34 million indigenous people are male. Meanwhile, there are 2.23 million Indigenous people who are female (Mustajab, 2023).

Indigenous peoples with traditional characteristics are associated with backwardness and are negatively stigmatized by the rest of society. Over the years, indigenous peoples have often been negatively stigmatized and considered backward and undeveloped. (Prasetijo, 2001) believes that the negative stigma has been ingrained in the history of Indigenous peoples in the past, with economic backwardness and development being the reasons for the stigma. The stigma of being backward means they often have no voice in public policy-making. One of the problems faced by indigenous peoples in Indonesia is the lack of state recognition and legal protection, which causes their existence to continue to be threatened. As a result, they often face territorial seizures, violence, and criminalization (Ulfa, 2023).

Modernization and development are challenges to the existence of indigenous peoples. Tejokusumo (2014) argues that scientists in the social field agree that human life is not static because human life is always changing or dynamic as well as the environment. Community dynamics is a situation where a society experiences social change, social change is a situation where there is a change in the social institutions of a society and can affect social conditions. These social institutions are human groups whose changes can affect the structure of society. William F. Ogburn in (Volti, 2004) and Moré (2006) both state that environmental change is influenced by two factors, namely material or tangible and immaterial or intangible factors. Social changes that occur in the community are very important, and these changes are mainly related to the patterns and behavior of people who are influenced by the environment. The dynamics of a society know no place and time. Therefore, this dynamic is universal. Adaptation to the environment and life that is being faced such as the influence of technology and science that is increasingly advanced is the result of community dynamics. One of the influencing factors is innovation. Innovation grows from people's efforts to achieve the life they want. With the progress of human thinking that transforms the current life into the expected life, the process of community dynamics will be more intense.

Innovation is often related to change, but every change is not necessarily an innovation. According to (Rogers et al, (2014), diffusion is the process of an innovation communicated through channels and a certain period from a community in a social system. Diffusion here is defined as a type of communication closely related to the spread of messages considered as new ideas, on the other hand, communication here is defined as a process where communicators create information and exchange information to achieve mutual understanding. Meanwhile, innovation is an idea or work that is considered and perceived by members of a social system that determines the level of adoption. There are four key elements in looking at the level and effectiveness of dissemination and adoption in innovation, namely: First, the level of adoption, here includes: observability, relative advantage, compatibility, complexity, and triability. Then the second communication channel is illustrated as a link between the communicator and the recipient of the message or communicant in delivering the message (Rogers et al., 2014). Communication channels are divided into two, namely mass media and interpersonal communication.

Then the third is time, where time becomes one of the important elements in the process. (Rogers (2014) suggests that the diffusion of innovation has four stages in the process, namely: knowledge, persuasion, decision, and confirmation. In the process of innovation diffusion, communication has an important role in social change in a community group, especially indigenous communities such as Kesepuhan Ciptagelar. Then the last is the social system, described as units that are interconnected and directly involved in solving a problem to achieve goals (Rogers et al., 2014). The social system is the boundary within which innovations spread. Members or units in the social system include individuals, informal groups, organizations, and subsystems. The theory assumes that innovations can spread through a predictable model, and some people adopt an innovation as soon as they hear about it, while others take longer. Various elements of the social system are also discussed, including the role of opinion leaders and change agents.

Indigenous groups are also characterized as dynamic in their changes depending on internal and external conditions. Society and culture are functionally interrelated for the survival and vitality of society. This is part of the process of community dynamics. Although, some people who do not participate as agents of innovation to change but do not rule out the possibility of being carried away to change. Society and culture are two relationships that become concepts in the continuity of community dynamics (Nahak, 2019). Indigenous or traditional groups tend to maintain values, norms, and habits that have been passed down from generation to generation, so there are still many thoughts of some cultural groups that reject change.

The advancement of the times that gave birth to many technologies, especially increasingly sophisticated communication technology, poses a challenge to indigenous peoples because it is increasingly difficult to resist social change. According to (Narwoko & Suyanto (2015), social change has three dimensions in its changes, namely: (a) structural; the structural dimension is seen in changes in status and role. Status changes can be identified from the presence or absence of changes in roles, power, authority, functions, direction of communication, and so on. (b) cultural; this dimension looks at the presence or absence of changes in material culture (technology) and immaterial in the form of ideas, values, norms, and social rules that become collective consciousness. (c) interactional; changes in the interactional dimension point more to the logical consequences of changes in the two previous dimensions.

Along with the advancement of science and technology in the field of information and communication, the process of social dynamics has become more intense. The spread of innovation is no longer limited by space and time, the introduction of this innovation is expected to give meaning to the improvement of social life without affecting the established order of social life. Social change is defined as important changes in social structures, behavior patterns, and social interaction systems, including changes in cultural values, norms, and phenomena. Change will always exist in the course of people's lives and become the driving force of their lives. The only difference is how fast or slow the change occurs, even one person or a group of people living in a remote area will experience the dynamics of life.

Indigenous groups also have their dynamic characteristics in change, depending on the internal challenges and external forces they face. One of them is the Ciptagelar indigenous community, which has its dynamic characteristics in its society, where they are open and adaptive to the flow of modernity and globalization developments such as access to the internet, the use of cellphones, the creation of drones, the creation of the CigaTV television station, the creation of power plants using turbines, and Swarsa Ciptagelar radio. But here, the Cipta gelar Indigenous people still uphold the social values and culture of their ancestors such as cooperation, social care, and in the agricultural process the community does not sell rice and rice, the agricultural process from planting to harvesting is still done manually, they use local seed rice and the process of planting rice is carried out once a year. This is done to keep balancing the life structure of the Ciptagelar indigenous people.

Development and empowerment are some of the efforts of the Kesepuhan Ciptagelar indigenous community to maintain a balanced life structure without causing social conflict. Increasing the ability of community skills and the utilization of science and technology, by seeking changes in technological advances to continue to answer the community's needs by strengthening potential and innovation. The diffusion of innovation in the communication process is expected to result in social change. In interpersonal and group communication in the process of diffusion of innovation, the messages conveyed are new ideas aimed at making changes in the process of development, development, and empowerment of the Ciptagelar Indigenous community.

2. Research Methods

The form of research for this journal article is descriptive using a qualitative approach to examine the conditions of natural objects, focusing on social science and behavioral problems, and the role of organizations, groups, and individuals. Descriptive research focuses its attention on finding facts as they are. Based on the explanation above, it can be said that the descriptive research method is a method that has the aim of analyzing data by describing or describing the data that has been collected without any intention of concluding (Sugiyono, 2016).

This research in data collection uses a document study method where data is obtained from primary and secondary sources. Primary data sources in this study are researchers exploring information through literature studies or written sources from both research journals and research reports related to the topic of writing that can be used as data. Secondary data sources are obtained from other supporting literature such as books, Ciptagelar documentaries, the internet, and other sources.

3. Results and Discussion

3.1. Innovation

The first element in this research is innovation. The intended innovation in this research is that the Kesepuhan Ciptagelar Indigenous community is open to and adopts technological developments as an object with an element of novelty. Indigenous peoples who are close to traditional characteristics are associated with decline and get a negative stigma from other communities. There are several characteristics of innovation in explain the level of adoption, below is an explanation of these characteristics:

Observability This talks about the extent to which the results of the innovation can be seen. The easier it is for members in the group to see the results of the innovation, the greater the innovation can be adopted (Rogers et al., 2014). The first visible result of innovation in the Kesepuhan Ciptagelar Indigenous community was the construction of a hydroelectric power plant using a wood wheel in the Ciptarasa village area in 1988, which was initiated by the late Encup Sucipta better known as Abah Anom as the leader of Kesepuhan at that time to illuminate 55 houses (Praja et al., 2021). The success of the construction of electricity for the first time made the Ciptagelar Indigenous community able to see and feel the results of these innovations so that the community there easily accepted and adopted these innovations. This can be seen with the results of innovations carried out in cooperation afterward, such as the construction of a power plant using a larger turbine with a capacity of 60,000 wat with a target to illuminate 6,000 houses in the Kesepuhan community, the construction of the CigaTV television station, and Swarsa Ciptagelar radio founded by the leader of the Kesepuhan Abah Ugi who replaced his late father in 2007 and other innovative results. Kesepuhan leaders have a very important role as opinion leaders and agents of change in encouraging the level of adoption in innovation diffusion.

This relative advantage discusses the extent of the benefits generated by the innovation (Rogers et al., 2014). The level of advantage can be measured by economic factors, convenience, social position, and satisfaction. The adaptation and innovation of technology by the Ciptagelar Indigenous community has these characteristics, seen from an economic point of view, the construction of a water turbine power plant as intermediate technology by utilizing river water sources in Cicemet, Cibadak and Sukamulya which are capable of entering 60,000 wats, by using micro-hydro, another name for electricity usage in Kesepuhan Ciptagelar Village rather than using electricity from PLN. the benefits or perceived by the Indigenous community in addition to being able to meet household needs are also cheaper than using electricity from PLN. The benefits or advantages obtained are that although the Ciptagelar indigenous people accept and follow the development of modern technology, it does not have a negative impact. This can be seen by the Ciptagelar indigenous people still upholding their ancestral customs and culture. CIGA TV is used to spread the values and culture of the ancestors to be maintained, this can be seen from the content of the broadcast program of the television station, namely agricultural activities, traditional ceremonies, and other programs, and occasionally CIGA TV shows music, soap operas, documentaries and even Hollywood films. Abah Ugi, the Kesepuhan leader, assigned Yoyo Yogasmana to manage the television. Kang Yoyo himself has the position of community media leader and his members are Asep and Andri (Praja et al., 2021).

This compatibility discusses the extent to which an innovation is considered to be in line with a group's existing values, and past experiences, and needs to be adopted (Rogers et al., 2014). The Kesepuhan Ciptagelar Indigenous Community has a view of life called "*kudu bisa ngigelan jaman, tapi ulah kabawa ku jaman*" which means that the Ciptagelar community must be able to keep up with the times without leaving the customs and traditions left by the ancestors (Praja et al., 2021). As explained above, the Ciptagelar Indigenous people accept and follow the development of modern technology and even innovate but they still uphold the customs and culture of their ancestors such as cooperation, social care, and in the agricultural process the community does not sell rice and rice, the agricultural process from planting to harvesting is still done manually, they use local seed rice and the process of planting rice is carried out once a year. This is done to keep balancing the life structure of the Ciptagelar Indigenous community. Development and empowerment is one of the efforts of the Kesepuhan Ciptagelar indigenous community to maintain a balanced life structure without causing social conflict. Increasing the ability of community skills and utilization of science and technology, by seeking changes in technological advances to continue to answer the community's needs by strengthening potential and innovation.

The complexity discusses the extent to which the innovation is considered difficult to understand and implement by most members within a social system, leading to a slow adoption rate (Rogers et al., 2014). Traditional leaders play a very important role as opinion leaders and agents of change in promoting the level of adoption in the diffusion of innovation, with the current traditional leader being Abah Ugi. In the research by Dalil & Rahardjo (2019), it is revealed that traditional leaders often face challenges in introducing innovation to the community. According to Abah Ugi, the obstacles depend on the implementation of the technology and its alignment with cultural values and norms as a foundation. The dissemination of innovation in the Ciptagelar community must consider the needs of the people and align with customary norms as a foundation. In Nugraha's

(2021) research, it is explained that in the process of building power plants using turbines, the Ciptagelar Indigenous community initially desired electricity for every home and was open to technology while still adhering to traditional principles. Then conduct an assessment of the community's needs for electricity. Then, we began to identify potential through natural resources, one of which is the large river flow as irrigation in the Cicemet area, which was excavated to be developed into a turbine project. The cooperation in the construction of the turbine building, the widening of the water channel, and the installation of cables serve as a form of social capital process, and now we are at the maintenance stage. Looking at the two studies above, the dissemination of innovation through assessment by considering needs and suitability is agreed upon first; once agreed upon, the work is carried out collaboratively.

The possibility of trying (trialability) discusses that individuals within a group will not adopt an innovation if they do not test it first (Rogers et al., 2014). As previously discussed, since 1997 the Ciptagelar Indigenous community has initiated the construction of a hydroelectric turbine utilizing water power. This initiative was encouraged and mandated by the late Abah Anom (the previous customary leader) to be open to the utilization of technology in exploring the potential of natural resources there. The first step taken was to hold a grand deliberation with the Rorokan, traditional elders, and the community of Kesepuhan Ciptagelar. This micro-hydro system was studied through self-learning and cooperation, starting with a small-scale system. The reason for using intermediate technology (characteristics of intermediate technology include not requiring a large capital investment and not needing new knowledge, as it is routine) is due to its low construction costs, significant water potential, and environmental friendliness. The success of the pilot project for the development of power generation turbines using intermediate technology, carried out through cooperation, has led to a high adoption rate of subsequent innovations and made it easy to implement them within the community of Kesepuhan Ciptagelar. This can be seen with the subsequent innovations that have been adopted, such as access to the internet, the use of mobile phones, the establishment of the CigaTV television station, the creation of power plants using turbines, the Swarsa Ciptagelar radio, and others.

In addition, Rogers explained that trials do not have to be conducted by all individuals directly; rather, trials can be carried out by known individuals within a community or opinion leaders, who are sufficient representatives in conducting trials that can convince individuals of the innovation. The change agent here plays a crucial role in accelerating the innovation process for individuals by facilitating the demonstration of new ideas within a group. The stages of the activity have an effective impact, especially if carried out by opinion leaders. In the context of the Ciptagelar Indigenous community, the leaders of the customary council, namely the late Abah Anom (the previous customary leader) and Abah Ugi (the current customary leader), play a very important role as opinion leaders and agents of change in initiating and encouraging the adaptation process in the diffusion of technological innovations while balancing it with a steadfast adherence to the values and cultural heritage of the Ciptagelar Indigenous community as it exists today.

3.2. Communication Channel

The second element is the communication channel, illustrated as the link between the communicator and the message recipient or communicator in the delivery of the message (Rogers et al., 2014). Communication channels are divided into two, namely mass media and interpersonal communication. As we know, the Ciptagelar community has CIGA TV as the local television station there. Abah Ugi, as the leader of the elders, assigned Yoyo Yogasmana to manage CIGA TV. Kang Yoyo holds the position of community media leader, and his members are Asep and Andri. CIGA TV is utilized as a communication channel to disseminate messages to the Ciptagelar Indigenous community. This can be seen from the television content, which is dominated by programs showcasing community activities, ranging from rituals, communal work, and buffalo herding to agricultural activities, and even accommodating television requests from the community.

In Nugraha (2021) research, it is explained that CIGA TV was established in 2003 and collaborated with technicians from India to find a signal network to connect with the residents' televisions. The cost of establishing this local television station comes from community self-funding and voluntary donations from guests. The development of CIGA TV aims to preserve the culture and traditions that are deeply rooted in Kesepuhan Ciptagelar. In addition, the Ciptagelar community has a radio station known as Radio Swara Cipta Gelar, or more commonly referred to as RSC FM, which broadcasts on the frequency of 107.7 MHz. RSC Radio Swara Ciptagelar FM has been established since 2004 as a communication medium between Kesepuhan and its residents, serving as a community media outlet for Kesepuhan. RSC is utilized as a communication tool among the residents of Kesepuhan, while also serving as a means of conveying information from the Ciptagelar Kesepuhan to the people of Banten Kidul in general.

The second type of communication channel is interpersonal communication. According to Rogers et al (2014), interpersonal communication channels are more effective in persuading individuals and other decision-making units to adopt an innovation. One of its characteristics is that this communication involves personal

interaction between two or more people face to face. The Ciptagelar community also utilizes this type of communication channel, leveraging technology to explore the potential of natural resources in Ciptagelar, typically through a grand deliberation agenda involving community leaders, traditional elders, and the people of Ciptagelar. This grand deliberation is usually held by considering the needs of the community and aligning with customary norms as a foundation for technological innovation, which is carried out collaboratively during the development process.

3.3. Time

The third element studied is time; according to Rogers et al (2014), time is another important element in the process of innovation diffusion. Time measurement can be viewed from several factors, including the five stages in the innovation-decision process, which are:

The first stage is knowledge, which is the stage in the dissemination of information about innovations. At this stage, individual awareness will shape the definition of an innovation and how that innovation functions. Rogers explains that there are three types of knowledge sought by society, namely awareness or knowledge of the existence of an innovation, knowledge of how to use the innovation, and knowledge that underlies how the innovation functions. The Kesepuhan Ciptagelar Indigenous Community has a worldview known as "*kudu bisa ngingelan jaman, tapi ulah kabawa ku jaman*" which means that the Ciptagelar community must be able to keep up with the developments of the era while not abandoning the customs and traditions entrusted by their ancestors. The Ciptagelar elders still preserve the authenticity of ancestral traditions as a legacy, while living in harmony with the modern order today.

One way that the Ciptagelar elders assess the presence of innovation is by fostering awareness that the innovations to be developed align with the needs of the community and are following customary norms. This can be seen from the development that has been carried out by utilizing natural resources in Kesepuhan Ciptagelar to meet the daily needs of the community, such as hydropower plants using the rivers there, the construction of water channels, and the establishment of a local television station (CIGA TV) and Ciptagelar Swarsa Radio. (RSC FM). In addressing differences, efforts are made by building common ground with the target community. This is done by involving opinion leaders, community figures, and third parties (Rogers et al., 2014). The elders of Ciptagelar, in addressing this difference, held a grand deliberation involving the Rorokan, traditional elders, and the community. At this stage of knowledge, the Ciptagelar elders utilize grand deliberation to convey important information. Here, the decision-making unit of the elders must be able to understand basic information related to innovations, such as what innovations are being introduced, their benefits, advantages, and of course, the innovations must align with customary norms.

The second stage is persuasion, which occurs when members or groups express positive or negative attitudes toward the innovation. At this stage, members actively seek information about the innovation; what is most important here is the message that is received and how the members interpret it (Rogers et al., 2014). At this persuasion stage, the Ciptagelar elders utilize a grand deliberation to convey information by involving the Rorokan, customary elders, and the community. In this activity, the community actively seeks to learn about the innovations that will be implemented by asking questions and engaging in discussions. The purpose of the agenda is to address differences and to build a common understanding. The elders also conduct control messages to disseminate information related to the innovations that will be implemented. Control messages are carried out at every activity and utilize communication channels as a means to convey basic information related to the innovations, such as benefits, advantages, and of course, the innovations must align with customary norms in their implementation. This is done so that the community can receive the message well regarding the introduction of the innovation and influence the formation of a positive attitude towards the introduced innovation.

The third stage is the decision, which occurs when members or a group decide to determine whether or not to adopt an innovation (Rogers et al., 2014). Self-adoption is the decision to fully embrace a new idea as the best course of action. Several factors influence the decision-making process of the Ciptagelar customary community in adopting an innovation. First, the Kesepuhan Ciptagelar has a guiding philosophy that states, "One must be able to adapt to the times, but not be carried away by them," meaning that the Ciptagelar community must be able to keep up with the progress of the times while not abandoning the customs and traditions passed down by their ancestors. Both innovations or new ideas adopted are based on the needs of the community, their benefits, and the application of technology, viewed through the lens of their alignment with cultural values and norms as the foundation for adopting an innovation. This can be seen from the construction of turbine power plants based on the needs of the community for home lighting, and the benefits felt by the community such as the fulfillment of household needs and lower monthly costs compared to using electricity from PLN, as well as the implementation of other technologies that have already been carried out. The three elders of Ciptagelar involve all elements of the community in the decision-making process for the innovations they wish to implement. In this case, the Ciptagelar

Elders utilize communication channels through CIGA TV, RSC FM, and grand deliberations to disseminate and decide on adopting an innovation.

The fourth stage is implementation, which occurs when members or groups agree to adopt an innovation. At this stage, there is a behavior change caused by an idea, thought, and object that is truly applied (Rogers et al., 2014). In this case, the implementation refers to the participation or involvement of the Ciptagelar Indigenous community in the process of applying or developing technology through cooperation. This is because the elders still firmly uphold the social and cultural values of their ancestors, one of which is mutual assistance, a customary practice of the local indigenous community. Additionally, funding for development is carried out through collective contributions from each member of the community.

3.4 Social System

The social system is another important element in the process of innovation diffusion. The social system is illustrated as interconnected units that are directly involved in solving a problem to achieve a goal (Rogers et al., 2014). The social system is the boundary where innovation spreads. Members or units in a social system include individuals, informal groups, organizations, and subsystems. This theory assumes that innovation can spread through a predictable model, with some people adopting an innovation as soon as they hear about it, while others take longer. Various elements of the social system are also discussed, including the target audience, the role of leaders' opinions, and change agents.

In introducing innovations and technological developments carried out by the Kesepuhan, the Traditional Leader known as *Sesepuh Girang*, namely *Abah Ugi*, plays a very important role. Here, the target audience or members of the social system are the entire indigenous community in Kesepuhan Ciptagelar, particularly the elderly, as well as teenagers and young adults who are more receptive to new ideas. In addition, an important communication target to assist *Sesepuh Girang* in introducing innovations is the *Barisan Kolot*, *Rorokan*, and media leaders. According to Rogers et al (2014), opinion leaders are individuals or groups that provide information and advice related to innovations to members of a social system. What opinion leaders say and do regarding an innovation can serve as important considerations for individuals or other units receiving the innovation. In introducing and developing technology in the Ciptagelar community, the strategy used is to maximize the role of opinion leaders in introducing innovations. Several opinion leaders in the Ciptagelar community are actively involved, all of whom play a key role as communicators and extensions of influence.

First is the Traditional Leader or Elder *Girang*, namely *Abah Ugi*, who plays a very important role in encouraging the process of innovation diffusion. In the research by Dalil & Rahardjo (2019), it is explained that *Abah Ugi* gained his knowledge during his school years, through books, and also the internet. The latest innovation is the establishment of a self-managed internet network. In the theory of diffusion of innovations, diffusion refers to the spread of new information, innovations, or new processes throughout society. Based on the explanation above, *Abah Ugi* as the Traditional Leader has a role as an innovator, being the first person to adopt innovations and then introduce them to the community within the scope of Kesepuhan Ciptagelar (Joseph, 2011).

The second is *Barisan Kolot* and *Rorokan*, the Traditional Leaders who are assisted in their leadership structure by several individuals known as *Baris Korot* and *Rorokan*. *Baris Kolot* and *Rorokan* are those who serve as guides and advisors, providing consideration to the Traditional Leaders regarding the interests of the social group Kesepuhan Ciptagelar. *Baris Kolot* has responsibilities according to their respective fields. The Traditional Council also has the task of regulating the customary norms that govern society based on beliefs. In this case, customary sanctions are not imposed physically by leaders and elders, but rather take the form of illness and disasters that befall the individual. The application of customary values and norms is a prerequisite for someone to be recognized as a member of the Ciptagelar indigenous community. This system of values and customary norms serves as the foundation for the behavior of the community. Positions in this customary system, such as *Rorokan* and *Baris Kolot*, are granted based on lineage (Safitri et al., 2024).

For the three Community Media Leaders, the community media position is filled by *Yoyo Yogasmana*, and the media worker positions are filled by *Asep* and *Andri*. The results of innovation and technological development in the Ciptagelar community have given rise to a community media that plays an important role in disseminating information related to innovation and preserving existence while widely spreading cultural values and norms. Community media assists the role of Traditional Leaders and *Baris Kolot* in socializing activity agendas to the community, especially the indigenous people. Community media presentations that convey traditional values are also intended for the outside community. In this case, community media facilitates the dissemination of information related to the innovations of the Ciptagelar indigenous community. The presence of community media, in this case, serves as a tool for traditional leaders and *Baris Kolot* in assisting and conveying information, innovations, and customary interests while also communicating customary values (Safitri et al., 2024).

(Rogers et al (2014) defines a change agent as a professional who can shape strategies and tactics to influence the desired adoption process. The more these parties participate in sharing their beliefs about innovation, the greater the level of acceptance will be. In the process of adaptation in the diffusion of innovation, traditional leaders or elder figures serve as change agents, supported by the conservative group, Rorokan, and the leaders along with their workers. In the theory of diffusion of innovations, diffusion refers to the spread of new information, innovations, or new processes throughout society. Based on the above, Abah Ugi as the Traditional Leader has a role as an innovator, being the first person to adopt innovations and then introduce them to the indigenous community within the Kasepuhan Ciptagelar. Based on the results of the analysis, it can be concluded that in introducing an innovation, one of the strategies or tactics employed is to maximize the use of change agents, opinion leaders, community figures, and intermediaries.

4. Conclusion

From the results of the research above, it can be concluded that in introducing innovation and the development of technology for adoption, the main elements in the diffusion process have been considered, namely innovation, communication channels, time, and social systems. The Ciptagelar elders utilize various types of communication channels that support each other's roles, namely the community media CIGA TV and Radio Swarsa Ciptagelar (RSC FM), as well as interpersonal communication through the Grand Consultation activities involving Traditional Leaders or Grang Elders, Rorokan, Traditional Elders or Barisan Kolot, and the Indigenous Community. The message is processed by considering various characteristics of innovation, which include relative advantage, compatibility, complexity, trialability, and observability.

In addition, to influence the desired adoption process, the Kesepuhan Cipta employs strategies and tactics by maximizing the role of opinion leaders, namely the Traditional Leaders or Sesepeuh Grang, who are hierarchically supported within the leadership structure of Kesepuhan Ciptagelar, which includes Rorokan, Barisan Kolot, and media leaders. (Media Komunitas). The Kasepuhan Ciptagelar often faces challenges in introducing innovations to the Indigenous community. According to the Indigenous leader, Abah Ugi, the difficulty in presenting an innovation to the Indigenous people in Kasepuhan Ciptagelar depends on the implementation of the technology and its alignment with the values and norms of the customs as a foundation. These obstacles can still be overcome by continuously developing and providing information that meets the needs, benefits, and customary norms as a basis for the target audience, particularly the Indigenous community, by utilizing various communication channels.

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