

Original Research Article
**New Media Adaptation through
Environmentally Friendly Dissemination
Messages at a Religious Organization During
the Covid 19 Era in Indonesia**

ABSTRACT

This study seeks to explore new media adaptation through environmentally friendly dissemination messages at a religious organization during the Covid 19 era in Indonesia. This study used the phenomenographic method in a constructive/interpretive paradigm to explore the difference in the experience of members of the congregation who participate in online worship versus face-to-face worship to demonstrate environmentally friendly dissemination messages. Data collection was carried out through in-depth interviews with informants who represented three levels of membership of ordinary members, church administrators, and organization administrators. Secondary data was obtained through the documentation of social media of the religious organization (the Christian Church of East Java) in Surabaya, East Java Province, Indonesia. The findings of this study confirm different variations of experience in synchronous and asynchronous worship. The variety of experiences is divided into knowledge, feelings, and mindset of the congregation. Synchronous message dissemination contributes strongly to the knowledge, feelings, and mindset of the congregation in facing changes in worship models. This study contributes by offering an alternative to the phenomenographic method in the study of organizational communication. The limitation of the study lies in the object of the study which is limited to informants from the local church in urban areas. This research has yet to accommodate the online worship experience for congregations in rural areas.

Keywords: Covid-19, environmentally friendly, new media, the religious organization

1. INTRODUCTION

Covid-19 is a new pneumonia disease that was first reported in Wuhan on March 11, 2020, and the WHO declared it a global public health emergency [1]. Covid was first confirmed in Indonesia on March 2, 2020, by infecting 2 Indonesian citizens. During the past year, Covid-19 has spread to 228 countries and infected approximately 498,7 million people with a death toll of approximately 6,2 million people [2]. As reported from the official website of the Indonesian government [3], there are approximately 4.2 million people infected with Covid with a mortality of approximately 144,000 in Indonesia. East Java had occupied the second-highest number of Covid-19 cases in Indonesia [4].

This situation caused a problem with the implementation of worship in East Java, especially in Surabaya as capital of East Java Province. Based on BPS-Statistic Indonesia (2019), 700 Protestant churches and 33 Catholic churches have been closed, leaving 539 thousand Christians and 158,000 Catholics no choice but to find new methods for worship due to the Large-Scale Social Restrictions (PSBB) imposed by the government. The PSBB carried out by the East Java Provincial Government was extended three times, from 28 April to 11 May 2020, 12 May to 25 May 2020, and from 28 May 2020 to 8 June 2020.

As reported by Kemenkeu.go.id, the Covid-19 cases have decreased since November 17, 2021, and only 522 daily cases were recorded [5]. The pandemic, on the other hand, has not vanished from the community, leading to online worship. The church as a place of worship complies with the regulations issued in the Circular Letter of the Minister of Religious Affairs No. 15 of 2020 concerning Guidelines for Performing Religious Activities in Places of Worship to Keep People Productive and Safe During the Ongoing Pandemic. The church must follow the government regulation, which stipulates that the maximum congregation attendance in online worship is only 20% of the total room capacity.

During a pandemic, all activities from daily church affairs to worship are carried out using various internet-based multimedia applications such as WhatsApp, Instagram, Zoom, and YouTube. This is owing to technological advancements, particularly the widespread use of the internet in society. The internet is multimedia that has been integrated with mass media, mobile phones, and computers or laptops. Multimedia is defined as a combination of at least two media of input and output [6]. Multimedia is a combination of computer and video [7]. This media can be in the form of sound or audio, animation, music, video, text, graphics, and images [8]. Thus, it can be concluded that Multimedia is a file format that combines multiple materials in the form of text, sound, images, or videos, all of which are packaged in digital form. Multimedia can be interpreted and can be used to convey messages anywhere and anytime, without being limited by space and time. The term new media refers to media that offers digitization, convergence, interactivity, and network development [9]. The use of media during a pandemic is critical in the implementation of online worship since it may reach far-flung locations, anywhere, and at any time.

Previous studies on the implementation of online church services only focus on the effectiveness of online worship. A study conducted by Dominggus (2020) emphasizes the effectiveness of organizing online worship [10]. Another study carried out by Sunarto (2021) focuses on the relevance of online worship [11]. Meanwhile, research conducted by Saputro (2020) emphasizes the readiness of church online worship during the Covid-19 pandemic [12]. There has been no research that specifically analyzes the synchronous service in the dissemination of the technomedia-based message to local churches in Indonesia. This is, of course, a research gap that will be addressed in this article. The formulation of the research problem in the research is "how is the synchronous service using new media at local churches in Surabaya as a means of message dissemination during the Covid-19 pandemic?"

2. LITERATURE REVIEW

2.1 New Media and Its Characteristics

New media is a type of media that utilizes the internet; it is an online medium that is built on a flexible technology that has the ability to be interactive and can work both privately and publicly [13]. New media in another sense is a product of communication that has been integrated with technology along with digital computers [14]. According to Lister (2009), new media can be interpreted as a portmanteau which means a combination of two words and

has two different meanings [15]. It becomes a new meaning with the combination of 'producer' and 'consumer' into a 'portmanteau', which means 'prosumer'. Prosumer means an individual who can be both a media producer and a consumer [9].

New media is always associated with new technologies and new activities with interactive, digitalized, and converged media. In other words, this new media gives rise to the development of the world of technology. According to Flew (2002), new media is a convergence of analog media and turns into digital media [16]. Media convergence is a combination of three elements of new media such as information technology, information networks, and media content.

The emergence of new media is inseparable from the existence of the internet. The internet is the most important information tool for the future as it is capable of storing, manipulating, encoding, and receiving messages [9]. The Internet makes communication through new media can change from one-way flow or two-way flow to multi-way flow. In other words, new media can bridge communication between people in various contexts. It is not constrained by place or time, allowing it to be accessible from anywhere and at any time.

According to Mc Quails (2011), the characteristics of new media are interconnectivity, access to the recipient of the message can be as a message sender, interactivity, usability with an open and diverse character, and is everywhere [13]. There are five main categories of new media with similarities to certain channels and can be distinguished based on usage, content, and context such as (1) interpersonal communication including personal telephone and e-mail, (2) interactive game that is computer-based with virtual reality; (3) information search such as the internet; (4) collective participation including the use of the internet to share and exchange information or ideas; and (5) substitution of broadcast media to receive or download broadcast content [13].

The characteristics of the six new media are (1) digital, (2) interactive, (3) hypertextual, (4) networked, (5) virtual, and (6) simulated [15]. First, digital is referring to the conversion of physical property (e.g., sound, letters, colors, and data) into numbers. In other words, digital is about assigning numerical values to a phenomenon. Second, interactive is a combination of the user to a media text, an independent relationship with the source of information for a more individualistic use. Third, hypertextual refers to a text (which can be in the form of images, sound, and video) that is linked to other texts. In a new media, hypertextual can be seen by, for example, the link from a text in a website to another website. The fourth, networked refers to new media that are connected. This connection makes use of the internet, which allows users or consumers to participate more actively in everything from interpreting to producing. Fifth, virtual is an understanding which is interpreted as an imitation of something real. Lastly, sixth, simulated refers to simulations that can be done by new media, either in the form of computer simulations or game simulations.

2.2 CMC (Computer-Mediated Communication)

CMC (Computer-Mediated Communication) is a new form of communication due to technological changes. This is marked by the use of smartphones, sending and receiving electronic mail (e-mail), and downloading songs, videos, or documents on the internet. CMC is an extension of the spectrum of interpersonal communication to mass communication and bridges the function of communication itself [17].

There is a significant difference between CMC and face-to-face meetings in that in face-to-face communication, we can see the expressions of our interlocutor. To put it simply, CMC makes a shift from the scope of interpersonal communication into the scope of mass

communication. This is called synchronous communication CMC can be shaped way when participating in a chat and discussion in real-time [17].

CMC has been evolving since the early 1990s when computers began to proliferate throughout society. Thus, the term CMC began to appear because people know the website, e-mail, and the internet. Today's technology developments make people have to use computers that are connected to the internet and make internet convergence happen. Internet convergence is divided into three parts [18]. They are (1) cyberspace, which is closely related to media in the form of digital networks where communication takes place (either with fellow humans or non-humans (robots)), (2) cyber society is a result of rapid technological development that has made communication easier, one of which is the use of the internet, which has made people reliant on the internet's services; (3) cyber culture, which is all forms of culture that have emerged because of the use of computer networks for communication, business, and entertainment.

As mentioned above, the internet is support for CMC. The internet is defined as a connected pattern or system that refers to the relationship between networks and other computer networks. In another sense, CMC uses the internet and is part of modern communication, and brings huge changes [19]. In other words, CMC can create a pattern where someone can communicate with other people using computer-based tools that are connected to the internet. For example, communicating using WhatsApp, Facebook, Instagram, or Zoom and Google Meet during the pandemic. The scope of the CMC includes the chat system, the world wide web (www), as well as the graphics system, text, audio, video, and hyperlinks.

CMC, like social media, can affect mental health; like a two-sided coin, it can have a good or bad impact [20]. The emergence of CMC has an impact on society, especially in the economic, social, and psychological fields. In terms of the social-economic, Users with a sociable disposition will be more likely to connect via the internet rather than meet in person and will become oblivious to the need to socialize with their surroundings. When viewed from an economic point of view, there is a change in lifestyle where someone can shop from online stores, as well as forcing the mass media, particularly print media, to transition to an online media system. From the psychological side, CMC may cause antisocial behavior, computer anxiety, and addiction.

In the context of this research, the use of Computer-Mediated Communication (CMC) is an environmentally friendly Dissemination Messages method where communication between the communicator and the communicant (audience) is facilitated by social media. Communication via CMC/social media prevents direct interaction opportunities, which is very dangerous in the era of the Covid 19 pandemic [21].

2.3 Synchronous and Asynchronous Service

There are two message dissemination models, namely Synchronous and Asynchronous, which are usually used in learning [22]. Synchronous and asynchronous methods are used for distance learning [23]. The use of synchronous and asynchronous methods can also be used in online worship [24]. Special conditions apply to the use of the space for worship, which deals with the issue of local vs. universal consistency [24]. In other words, a structural engine and knowledge structure overcome this problem with a well-defined model. Relationships in the form of connections, and behavior that determines evolution in the form of algorithms are all examples of interaction between components and entities (or actors). In other words, there must be a good relationship between the internet network and the messenger so that a worship service can run well. According to Jacob (2007), churches in

the United States have built a site or virtual church in such a way to create the possibility of performing worship virtually using asynchronously [25]. Asynchronous worship takes place online at a time that is convenient for the individual and does not necessitate concurrent online time.

The synchronous method is where communication is carried out when the presenter and hearer are present at the same time [26]. The synchronous method involves exchanging ideas and information with one or more participants during the same period using technology that is already connected to a computer with a network [27]. Its simple definition is direct communication using video calls or chatting using an application that is already connected to the internet. An example of synchronous methods is activities in class directly but connected to the internet, for example, by studying material simultaneously [23]. The advantages of synchronous communication are direct interaction and minimum misunderstandings in communication. The drawbacks are that it requires the presenter and participants present at the same time and the need for a strong internet connection [28].

The asynchronous method allows individuals to learn independently [29]. Communication using asynchronous methods is when the presenter and participants do not meet in a virtual space at the same time. So, the asynchronous method is a process of delayed communication, using e-mail, discussing with forums, editing a file, or writing a document online. Examples of asynchronous methods such as a notification to do homework and give work instructions, then providing a deadline for submitting homework [23].

The advantages of asynchronous communication are (1) high-quality dialogue since discussion can be done with more time than direct communication; (2) clear interactivity because it is connected to the internet; (3) Anyone can use the implementation of learning or communication at the time that is most convenient for them; (4) space commitment is irrelevant because the user is free to choose the time. While its weaknesses are (1) open forum with a time that does not correspond to reality; (2) misunderstanding in communication; (3) internet connection [28].

2.4 New Media and the Church

The church is a term used to refer to a group to be called forth [30]. The church is fundamentally a place of fellowship, not a gathering place. It is also stated that Christian worship is not rigid worship that is incapable of adapting to changing circumstances. All life requires adaptation to survive, including using social media for message broadcasting [31]. All forms of message broadcasting are very risky with hoaxes that easily spread quickly. The spread of hoax is a difficulty or risk that the church must face as it develops its understanding of social media.

The speed with which information is spread is the effect of the internet and greatly affects the community, especially when it comes to religion, understanding, and theological practice [31]. From this explanation, digital technology through social media has been used as well as possible to build a network without being limited by space and time. Technology should be utilized by the church as a resource wisely.

Within the church, there were some disagreements over how worship should be conducted; some agreed, while others disagreed. This causes struggles in the church, where technology has also developed rapidly and changed the pattern of life in society. A situation that is considered dangerous for the church is when the church itself is no longer relevant to a social change. Theodore Wedel illustrates that the eternal danger facing the church is an irrelevance [32]. The existence of these facts points to the growth of churches that practice

virtual worship. This view is also confirmed by John Stott (1975) stated that mission is part of active believers involvement to spread the gospel [33]. In other words, because of the advent of social media as a new medium, the church may now serve the congregation through social media and live streaming, which is not constrained by distance and time.

Worship is a major part of a church [34]. There were conflicts regarding this online worship. However, **we** have to adapt to the circumstances caused by the pandemic. It urges pastors who disagree to agree since, aside from government suggestions, the church must continue to carry out its duties. The implementation of online worship also radically changes communication technology, and it is used to describe changes in the church and how the church can understand contextually in the digital era [35]. A virtual church is a complement to a physical church. It is stated that this virtual church is a form of applying a worship activity or service through an application that is connected to the internet [25].

Behind technological development, there is an impact caused by the use of new media. New media has strengths and weaknesses in disseminating messages from the church to the congregation. It has the advantage of being accessible from anywhere and done remotely, as well as being practical. The disadvantages are that it takes time, requires money, makes people lethargic

3. METHODOLOGY

The design of this research is phenomenography in a constructive/interpretive paradigm. The focus of this study is to find out the variation in the experience of research subjects or informants [36]. The research method used is phenomenography. Phenomenography is a method used to see the content of thought rather than traditional psychology. It aims to learn how a person sees a concept that he sees [37]. According to Merton (1986), phenomenography consists of three things. The first thing is to focus on interests. Then the second is content-oriented. Finally, the third is describing the conception of various aspects of their reality. Figure 1 depicts the stages of phenomenography used in this study.

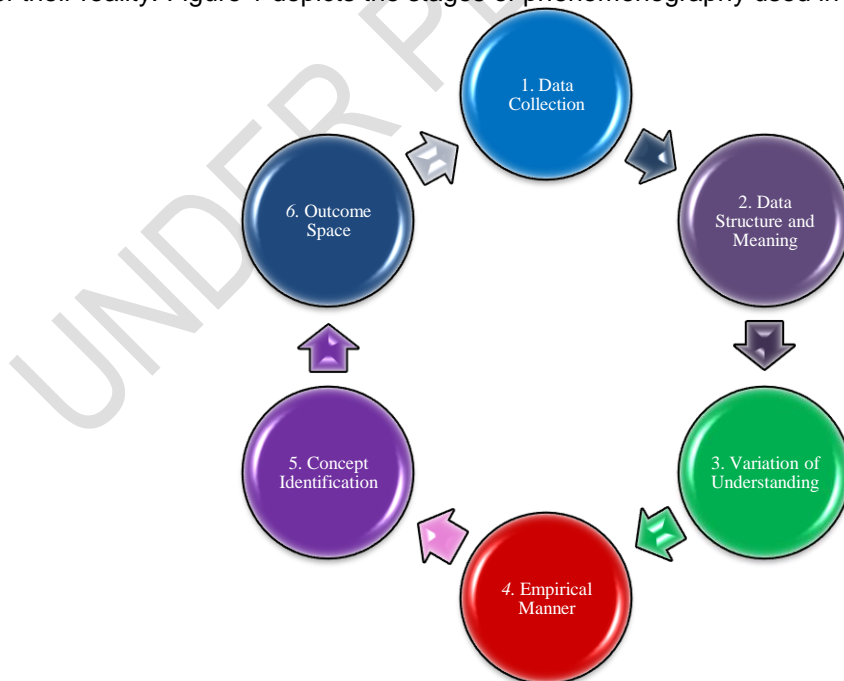


Fig.1. Phenomenography Stages (Merton, 1986)

This phenomenographic study used a non-purposive sample (samples selected at random but based on certain criteria). Data collection techniques were carried out by conducting interviews of several questions that were designed to encourage research sources to share experiences in using new media as a means of disseminating messages. The research subjects selected were (1) individuals representing church leaders in Surabaya, (2) individuals representing the Communion of Churches in Surabaya, (3) individuals representing the Regional Council (MD)/Mupel/Klasis in Surabaya; (4) individuals or members of the congregation who represent church members. To test the validity, this study used triangulation in theory and sources. After the data had been analyzed, it was compared to the theory and corroborated by informants who were not connected to the sources [38].

4. RESULTS

WHO decided that Covid-19 was a pandemic on March 9, 2020. The Coronavirus has spread rapidly, necessitating the restriction of face-to-face interactions to prevent the infection from spreading further. To prevent this spread, face-to-face activities are strictly limited, especially in the worship in churches. The church services that should be face-to-face have turned into face-to-face using the internet and new media.

According to Lawson, worship is an award for someone who is deemed worthy of respect [34]. It is an expression of gratitude, fear, joy, praise or respect to God for showing His love and keeping His people in safety and peace. Worship is a part or main activity of the church. Worship cannot be separated from Biblical theology values.

The 12 people interviewed by the researchers about their experiences with the messages they heard during worship expressed their feelings in a variety of ways. The expression of each informant's experience in using technology also reflects the position they have. Church leaders/pastors, church organization administrators, and congregation members have very diverse perspectives when they use the Zoom application, live streaming on YouTube, Google Meetings, and Instagram in online worship.

New media during the Covid-19 pandemic is considered very helpful for online worship. This has been verified by Pastor Dika (2021) that:

"The online worship allows worship to be accessed anywhere and anytime, even if you are abroad,"

In addition, the congregation does not need to meet face to face because it can prevent the spread of the Covid-19 virus. The congregation used applications that can be downloaded via the Play Store or App Store. The internet bridges the implementation of worship by using new media.

The use of applications such as WhatsApp and Instagram is managed by a team from the church, such as the youth team or the youth and multimedia commission (results of interview with Pastor Dika, 2021). All preparations on the theme for one year have been determined by the central church and distributed to churches throughout Indonesia (results of interview with Pastor Budi. 2021). Face-to-face meetings do result in two-way communication, but WhatsApp and Instagram provide opportunities for two-way communication, such as by sending responses or sending comments.

4.1 The Knowledge of the Congregations

According to this view, the church has made good use of community-developed technologies, particularly during the Covid-19 pandemic. However, the usage of this new media has downsides, as seen by the findings of informant interviews, which show that if worship is conducted online, there is signal interference or a delay. Signal interference and delay in communication can be regarded as noise. Noise is a factor that disturbs a message when the message is conveyed using a medium from source to destination [39]. As the researcher found in the following interview statement:

"It is often technical problems such as sound issue when the internet connection is poor." (Billy, 2022)

As a result, diverse interpretations of the message delivered by the pastor or church leader to the congregation may exist.

The process of interpreting messages in communication is called concept identification. The encoding process or concept identification is a stage in the production of messages and is framed or processed in such a way that it can be well received by the recipient of the message. According to the results of interviews with two informants who are pastors, in the process of making messages during worship, everything has been scripted and has gone through the stages of editing to avoid misunderstandings of meaning in the sermons or messages broadcast through applications such as Zoom, WhatsApp, and others. The encoding process for the worship takes place two weeks before D Day. While the church information is also planned ahead of time and follows a similar pattern, one or two weeks before D Day.

The process of interpreting the message by the congregation is called concept identification. The process of interpreting the message by the congregation can have different meanings from the initial meaning (which has been designed by church leaders). The factors that influence it could be thought processes, experience, and education. In the spread of the message through new media in this local church, it was found that signal interference greatly affects the meaning of the message conveyed during the sermon. From the results of interviews conducted, signal interference or noise greatly affects the meaning of messages conveyed through this new media. Because of the signal received by each member of the congregation's devices or possibly from the church itself, the message spoken during the sermon will shift significantly.

In addition, the mood and the surrounding environment of the congregation affect the reception of the message conveyed, so the message may not necessarily be well received. This was conveyed by one of the informants that:

"It's more spiritual offline, because in offline mass, I as a congregation can truly connect intimately with God. Not disturbed by other sounds such as the voice of parents, the voice of a maid, or the sound of vehicles, the sound of people passing by on the streets. Moreover, my church is located far from the highway." (Robert, 2022)

In addition, the researchers found other reasons:

"The volume of the sound is very low. We as listeners do not understand the content of the message that the Pastor wants to convey. So, you need to increase the volume on a laptop headphones, as well as a TV to get clear sound." (Marcel, 2022)

Based on the statement of this resource person, the meaning of the message can be not well received by the congregation, sometimes the volume is too small that it cannot be heard by the congregation watching at home. The low volume makes only part of the words audible

and only audible when there is an emphasis on a word. According to several sources, the way to handle this small volume is by sending comments back in the chat feature so that the use of devices during live sermons can be improved. According to some sources, if it is re-recording, they can only send remarks in the chat column.

4.2 The Feeling of the Congregations

The congregation's experience of attending or receiving messages via new media was made uncomfortable by the existence of this disturbance. Less solemnity, discomfort, boredom, and boredom were experienced by the informants. The researcher found several statements from the sources:

"I think it's more spiritual to go offline because we can both feel God's love in the church and we can both feel the warmth from other congregations" (Anabella, 2022)

"I think it's more spiritual offline because apart from being able to socialize with others, I can also eat hosti and receive blessings directly, besides that, because the church's ambiance is dearly quiet and very supportive, the worship feels very solemn" (Lina, 2022).

From the interview, no matter how sophisticated the development of electronics is, it still cannot beat on-site worship. This sensation of attending on-site worship eventually leads to the congregation preferring on-site worship, even though some still believe worship can be done online. The congregation's feeling and knowledge of the messages conveyed online or by using new media is at their peak, where the messages conveyed when there are disturbances cannot be interpreted properly.

The use of applications that appeared to be judged by some of the sources could result in disruptions that they caused themselves. For example, forgetting to press the mute button or sometimes the camera is still on causes some congregations to feel uncomfortable. Another reason for online worship is the sensation of being very uncomfortable when worshipping in a church because they are unable to serve correctly and carry out the message in which the form of serving is part of communication.

4.3 The Mindset of the Congregations

It may be said that the congregation's feelings influenced the thinking of some members of the congregation as quoted in an interview result:

"I hope that everything will return to normal, but with the pandemic, churches in Indonesia can be more technologically advanced so that evangelism can be more widespread and heard by many people." (Alvin, 2022)

In addition, Pastor Dika (2021) also said the same thing:

"This online worship can reach distant people with time differences, for example, those who are abroad can also join in worship."

In other words, there are differences of opinion when worship is carried out online. Some individuals agree because it allows them to contact others who are either too busy to go to church or who live too far away to go to church.

Meanwhile, those who disagree cited a variety of reasons, including a lack of solemnity, an inability to communicate directly, or the fact that people underestimate the importance of on-

site worship because they can attend online worship if they can't attend on-site worship. As Fillbert (2022) puts it:

"I hope all churches can worship offline as soon as possible, it's sad when all churches turn to online, I see many people around me are starting to fall from worship. Because maybe that was it, they didn't feel solemn when they worshiped online."

This is also confirmed by the other two pastors:

"Now, how to re-establish the presence of a huge number of people when they've gone offline. Congregations that are now in the city, prefer to be online rather than offline. Now, returning it to offline is difficult for them," (Pastor Dika, 2021).

According to the assertion, there are undoubted challenges to worshipping on-site. The church is having difficulty re-gathering the congregation to worship at the church since they are still afraid of the spread of Covid-19 or are busy so they cannot worship offline. In other words, the change in the mindset of using new media among the congregation has also changed the meaning of the message.

5. DISCUSSION

Based on the results of the analysis, the dissemination of the message through the experiences of informants shows a variety of emphasis. The variety of experiences is divided into three aspects of knowledge, feelings, and the mindset of the congregation. This means that the message dissemination in a synchronic manner contributes strongly to the knowledge, feelings, and mindset of the congregation in facing changes in worship models from conventional to technology/digital-based worship. For more detail, the visualization is presented in Figure 2.

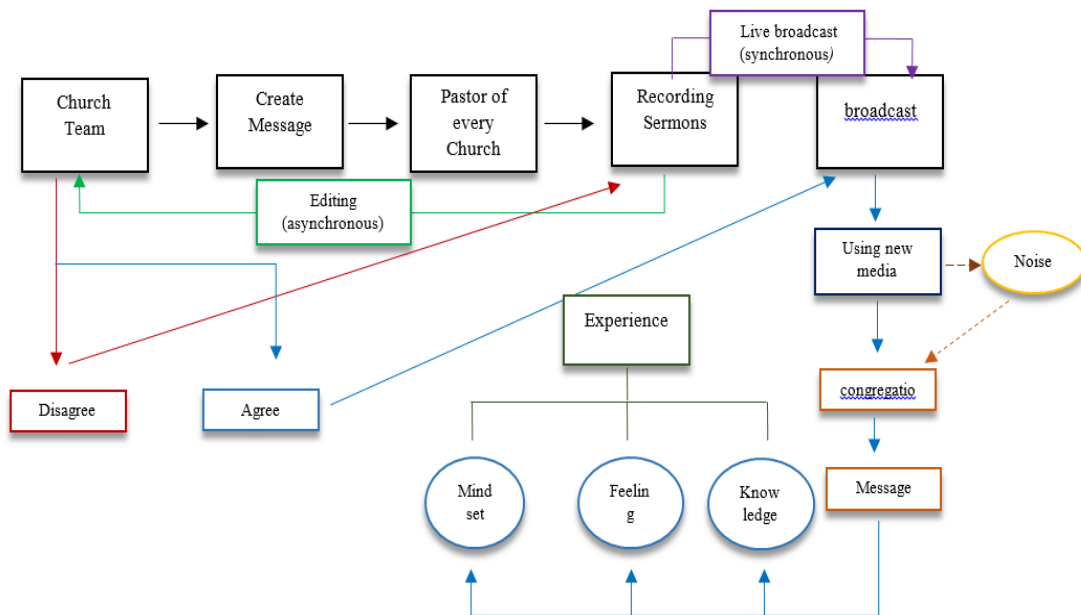


Fig. 2. The Experience of Message Dissemination in the Local Church

Several things considered in the dissemination of messages using new media are knowledge of message information and feelings when receiving messages, which result in a change in the mindset of the church congregation. The implementation of worship in this church is carried out with a mix of synchronous and asynchronous methods.

There are weaknesses and advantages of using synchronous and asynchronous communication [28]. The asynchronous communication is often carried out at local churches in Surabaya. As stated by Pastor Dika (2021), an asynchronous sermon requires extra preparation and takes a long time as illustrated in Figure 2. After receiving the material from the central church, the pastor in each church must make a recording that will be broadcasted on the day of worship. After the recording is ready, it will be given to the central church to go through the editing process. In the editing process, the central church team has the right to give a statement 'disagree' or 'agree' with the recording provided. If it is 'disagree', it will be sent back to the church so that it can be re-recorded. If the central church agrees, the program can be broadcasted on D Day. This asynchronous preparation for worship takes approximately 2 weeks.

The knowledge of the congregation in the use of new media technology will increase, but during worship, knowledge about sermons will not be understood optimally. This allows for misunderstandings in the interpretation of the sermon. Asynchronous communication urges the congregation to understand the explanation of the sermon independently. Not to mention when broadcasting may be disturbed by feelings, surroundings, or knowledge. The three factors listed above may cause the congregation's knowledge of the sermon during worship to be just partly accepted, or maybe not understood or accepted at all. The advantage is that the congregation can replay the sermon video. If there are congregations that do not comprehend; nonetheless, they can learn to comprehend and interpret the meaning of sermons during the service.

Especially if the worship is done synchronously, with the internet network coming from the congregation or the church itself. Synchronous communication involves information with one or more participants at the same time, using technology that is already connected to the internet [27]. Synchronous worship can help the congregation understand the sermon, or it can directly make them feel like they are in a church. Still, the signal that may not reach all places is very disturbing to the congregation, so it is possible that the message of the sermon during worship cannot be understood. Not to mention if there is an error in word choice that may be made by the pastor, the congregation who is constrained by the network may not hear the clarification spoken by the pastor directly.

Simply put, all the messages given by the church to the congregation are also related to meaning. Meaning can be interpreted differently by the congregation because it depends on gender, age, education, social background, and knowledge [40]. In the process of making a message called encoding, the church hopes that the congregation can understand this sermon well, but during the decoding process, a message may be interpreted differently by the congregation. Especially during the Covid-19 pandemic, the meaning can be different due to signal or internet network problems. Nowadays, the use of technology is inseparable from the congregation's technological knowledge. In asynchronous and synchronous worship, the congregation differs from one another in terms of knowledge, social context, gender, and the environment in which it is located.

The findings suggest that during the Covid-19 pandemic, the experience during worship, especially by using new media, greatly changed the feelings, knowledge, and mindset of the congregation. During the pandemic, the advancement of communication technology is extremely beneficial to the church; the congregation can still worship virtually. This is

evidenced by the statement of Lars Qvortup (2002) that three things need to be considered when attending cyberspace. They are space perception (especially visual and aural experiences), being in space (movement through space), and spatial practice (interacting with objects in a room) [25]. But the most important thing to remember is that cyberspace isn't only for storing data; it's also a place for social engagement and communication.

During the Covid-19 pandemic, the church used new media as a virtual space for worship. Local church congregations in Surabaya feel a difference when worshiping on-site and online. Previously, these congregations did not have the experience of online worship, and when it was carried out, their room was provided. The congregation had a radically different experience in online worship, in which they did not feel solemn during worship and their concentration may be distracted. This distraction is caused by signals or the environment where the congregation is located. Along with the reduction in Covid-19 and the decision to conduct worship in a mixed style, Pastor Budi (2021) has also stated that the church has been doing mixed worship since January.

Online worship also makes a change in a cyber society. Cyber society refers to the advancement of modern technology and the use of the internet for communication, as well as people being reliant on the internet's services [37]. During the pandemic, the church has also become reliant on technology for disseminating sermons and performing worship. Similarly, if a congregation wants to continue to carry out or attend worship without physically coming to the location, they can do so via the internet.

Asynchronous and synchronous worship shifts the worship culture from face-to-face to using internet-connected technologies. This makes cyber culture visible in church circles. Cyber culture has emerged due to the use of computer networks for communication, business, and entertainment [18]. Communication that was once possible directly is now only possible indirectly. The use of indirect communication is like using new media in the form of a chat or video call feature. Worship employs new media applications that are internet-connected and make consumers feel at ease. Finally, establishing a new culture in which, if someone are unable to attend church in person after the pandemic has passed, he/she can worship online.

Furthermore, this virtual worship experience has impacted the congregation's perspective, teaching them that if they cannot make it to church, they may worship electronically. The congregation's belief that, before the pandemic, worshiping had to take place in person at a church, but that now it may be done electronically through the use of an internet-connected program. Worship is a priority in a church which is usually called a ritual. As Habermas said ritual is a communicative act and a very complex and abstract relationship of ideas that are described in a concrete form [25]. Online worship will continue to be conducted in the same manner as before the pandemic, with the exception that no congregation will be present or will have been formed previously, without diminishing the substance of worship itself because the implementation of worship in these two methods uses the concepts of cyberspace, cyber culture, and cyber society [18]. All in all, worship is still performed following existing standards, but it is now packaged in a digital format to keep up with the times without diluting the core of worship.

6. CONCLUSION

The church looked for new means to keep worship going during the Covid-19 outbreak. Although not on-site, the use of new media is no stranger to the congregation. In the implementation of online worship, there are still several barriers to overcome, one of which is the problem of spreading messages. The spread of messages of online worship cannot be

separated from using new media and the internet. The message dissemination method is called synchronous and asynchronous.

The congregation's circumstances alter the meaning of the message after it has been broadcasted such as knowledge, age, gender, church environment, education level, and signal interference. Three things can be underlined regarding the use of new media, especially with the synchronous method in broadcasting messages including knowledge, feelings, and the mindset of the congregation. The distraction experienced when worshipping online (synchronously) has a significant impact on the dissemination of messages to Surabaya's local church. For this reason, the dissemination of messages using new media is considered by some local church members to be ineffective, especially with the synchronous method. This is because communication can still be disrupted due to network problems. Communication using the synchronous method requires a strong network from the congregation and the church.

What needs to be done is to worship in a variety of ways, including on-site once the pandemic is ended, while still adhering to health procedures and using online resources. Furthermore, it continues to disseminate messages through new media as a means of contact between the congregation and the church. To avoid misconceptions regarding sermons, every synchronous worship must be uploaded back to the account.

7. LIMITATION OF THE STUDY

This research has some limitations, such as the fact that it only reaches local churches in urban areas. This research has not accommodated the online worship experience for congregations in rural areas. The pandemic caused researchers to only focus on selecting limited research objects. Because the interviews were conducted using internet-based technologies, the researchers were unable to obtain a good description of the informants' emotions or facial expressions for this study.

This study also does not look at how the message is received by the congregation in the local church, therefore more research is needed in the form of receiving sermon messages to the congregation using reception analysis, which is extremely promising for the future. Because the Covid-19 pandemic is still threatening, asynchronous and synchronous preaching method are still being used.

DISCLAIMER:

Authors have declared that no competing interests exist. The products used for this research are commonly and predominantly use products in our area of research and country. There is absolutely no conflict of interest between the authors and producers of the products because we do not intend to use these products as an avenue for any litigation but for the advancement of knowledge. Also, the research was not funded by the producing company rather it was funded by personal efforts of the authors.

REFERENCES

- [1] A. N. Dzulfaroh, "Hari Ini dalam Sejarah: WHO Tetapkan Covid-19 sebagai Pandemi Global [Today in History: WHO Designates Covid-19 as a Global Pandemic].," 2021. <https://www.kompas.com/tren/read/2021/03/11/104000165/hari-ini-dalam-sejarah--who-tetapkan-covid-19-sebagai-pandemi-global?page=all> (accessed Jan. 08, 2022).

- [2] "Covid-19 CoronaVirus Pandemic," 2022. <https://www.worldometers.info/coronavirus/> (accessed Jan. 12, 2022).
- [3] Satuan Tugas Penanganan COVID-19, "Data Sebaran [Distribution Data]." <https://covid19.go.id/>.
- [4] CNN Indonesia, "Jawa Timur Sumbang Kasus Covid-19 Tertinggi Hari Ini [East Java Contributes Highest Covid-19 Cases Today]," 2021. <https://www.cnnindonesia.com/nasional/20211005173837-20-703745/jawa-timur-sumbang-kasus-covid-19-tertinggi-hari-ini> (accessed Jan. 08, 2022).
- [5] Kementerian Keuangan Republik Indonesia, "Kasus Covid-19 di Indonesia Terus Menurun, Vaksinasi Terus Dipercepat [Covid-19 cases in Indonesia continue to decline, vaccination continues to be accelerated]," 2021. <https://www.kemenkeu.go.id/publikasi/berita/kasus-covid-19-di-indonesia-terus-menurun-vaksinasi-terus-dipercepat>.
- [6] Turban and Dkk., *Aplikasi Multimedia Interaktif [Interactive Multimedia Application]*. Yogyakarta: Paradigma, 2002.
- [7] Rosch, *Easy Way To Understand The Multimedia*. Bostom: Allyn and Bacom, 1996.
- [8] Saprudin S., Munaldi M., Wijoyo A., & Prasetyo S.M, "Pembelajaran Multimedia (Studi Kasus: SMK Indonesia Global) [Multimedia Learning (Case Study: SMK Indonesia Global)," *Jamaika J. Abdi Masy.*, vol. 1, no. 1, pp. 63–70, 2020.
- [9] J. Luik, *Media Baru Sebuah Pengantar [New Media as an Introduction]*. Jakarta: Penerbit Kencana, 2020.
- [10] D. Dominggus, "Efektivitas Pelaksanaan Ibadah Daring Ditinjau dari Roma 12:1-2 [The Effectiveness of the Implementation of Online Worship in terms of Romans 12:1-2]," *Sanctum Domine J. Teol.*, vol. 10, no. 1, pp. 35–48, 2020, doi: 10.46495/sdjt.v9i1.57.
- [11] S. Sunarto, "Ibadah Online dalam Perspektif Alkitab dan Relevansinya pada Masa serta Pasca Pandemi Covid-19 [Online Worship in the Perspective of the Bible and Its Relevance During and After the Covid-19 Pandemic]," *TE DEUM (Jurnal Teol. dan Pengemb. Pelayanan)*, vol. 10, no. 2, 2020.
- [12] I. P. Saputro, "Analisis Kesiapan Gereja Kristen Protestan Melakukan Ibadah Daring Selama Pandemi Covid19 Menggunakan Metode Inferensi Tsukamoto [Analysis of the Readiness of the Protestant Christian Church to Conduct Online Worship During the Covid19 Pandemic Using the ," *J. Ilm. Realt.*, vol. 16, no. 2, pp. 67–72, 2020, doi: 10.52159/realtech.v16i2.136.
- [13] D. Mc. Quails, *Media Performance: Mass Communication and the Public Interest*. London: Sage Publications, 2011.
- [14] Creeber G. and M. R., *Digital Cultures: Understanding New Media*. Berkshire-England: Open University Press., 2009.
- [15] G. I. Lister M., Dovey J., Giddings S., Kelly K., *New Media: A Critical Introduction*, 2nd ed. New York: Routledge, 2009.
- [16] F. Terry, *New Media: An Introduction*. New York: Oxford University Press, 2002.
- [17] M. A. M. Baldwin R. John, Perry. D Stephen, *Communication Theories for Everyday Life*. USA: Pearson Education Inc. Boston, 2004.
- [18] C. C. Tomic, Alice; Lengel, Laura; Thurlow, *Computer Mediated Communication-Social Interaction And The Internet*. California: Sage Publications, 2004.
- [19] B. S. Khan and M. A. Niazi, "Emerging topics in Internet technology: A complex networks approach," *Internet Technol. Lett.*, vol. 1, no. 4, p. e41, 2018, doi: 10.1002/itl2.41.
- [20] A. Meier and L. Reinecke, "Computer-Mediated Communication, Social Media, and Mental Health: A Conceptual and Empirical Meta-Review," *Communic. Res.*, vol. 48, no. 8, 2021, doi: <https://doi.org/10.1177/0093650220958224>.
- [21] D. Gruda, A. Ojo, and A. Psychogios, "Don't you tweet me badly: Anxiety contagion between leaders and followers in computer-mediated communication during COVID-

- 19," *PLoS One*, vol. 17, no. 3 March, pp. 1–14, 2022, doi: 10.1371/journal.pone.0264444.
- [22] A. T. Peterson, P. N. Beymer, and R. T. Putnam, "Synchronous and asynchronous discussions: Effects on cooperation, belonging, and affect," *Online Learn. J.*, vol. 22, no. 4, pp. 7–25, 2018, doi: 10.24059/olj.v22i4.1517.
- [23] A. R. Lotfi and S. M. H. Hosseini Pozveh, "The effect of synchronous and asynchronous language learning: A study of iranian efl intermediate students' vocabulary learning," *Theory Pract. Lang. Stud.*, vol. 9, no. 12, pp. 1585–1594, 2019, doi: 10.17507/tpls.0912.16.
- [24] R. Mikkilineni, "Going beyond Church–Turing Thesis Boundaries: Digital Genes, Digital Neurons and the Future of AI," *Proceedings*, vol. 47, no. 1, p. 15, 2020, doi: 10.3390/proceedings2020047015.
- [25] S. Jacobs, "Virtually sacred: The performance of asynchronous cyber-rituals in online spaces," *J. Comput. Commun.*, vol. 12, no. 3, pp. 1103–1121, 2007, doi: 10.1111/j.1083-6101.2007.00365.x.
- [26] Muhammad Hanif Fahmi, "KOMUNIKASI SYNCHRONOUS DAN ASYNCHRONOUS DALAM E-LEARNING PADA MASA PANDEMIC COVID-19 [Synchronous and Asynchronous Communication E-Learning on Pandemic Covid-19]," *J. Nomosleca*, vol. 6, no. April, pp. 68–76, 2020.
- [27] C. G. Ogbonna, N. E. Ibezim, and C. A. Obi, "Synchronous versus asynchronous e-learning in teaching word processing: An experimental approach," *South African J. Educ.*, vol. 39, no. 2, pp. 1–15, 2019, doi: 10.15700/saje.v39n2a1383.
- [28] L. Simanuhuruk, *E-Learning: Implementasi, Strategi dan Inovasinya [E-Learning: Implementation, Strategy, and Innovation]*. Medan: Yayasan Kita Menulis, 2019.
- [29] E. Darmawan, "Implementasi Model Pembelajaran Asynchronous Dalam Perancangan Aplikasi Simulasi Panduan Pecinta Alam [Implementation of Asynchronous Learning Model for the Design of a Nature Lover's Guide Simulation Application]," *J. Cloud Inf.*, vol. 3, no. 2, pp. 13–19, 2018.
- [30] E. Purba and M. Magdalena, "Redefinisi Ibadah pada Masa Pandemi Covid-19 [Redifinition of Worship During the Covid-19 Pandemic]," vol. 4, no. 1, pp. 36–46, 2021, doi: 10.1177/2396939320967665.11.
- [31] Y. Afandi, "Gereja Dan Pengaruh Teknologi Informasi 'Digital Ecclesiology' [Church and Technology Information Effect] 'Digital Ecclesiology,'" *FIDEI J. Teol. Sist. dan Prakt.*, vol. 1, no. 2, pp. 270–283, 2018, doi: 10.34081/fidei.v1i2.12.
- [32] H. Clinebell, *Tipe-tipe dasar Pendampingan dan Konseling Pastoral [Basic types of Pastoral Mentoring and Counseling]*. Jakarta: BPK Gunung Mulia, 2002.
- [33] D. I. Era, R. Industri, Y. F. Camerling, M. C. Lauled, and S. C. Eunike, "Gereja Bermisi Melalui Media Digital [The Church Mission Through Digital Media]," *Visio Dei J. Teol. Kristen*, vol. 2, no. 1, pp. 1–22, 2020.
- [34] F. Tambunan, "Analisis Dasar Teologi terhadap Pelaksanaan Ibadah Online Pascapandemi Covid-19 [Basic Theological Analysis of The Implementation of Online Worship After the Covid-19 Pandemic]," *Epigr. J. Teol. dan Pelayanan Kristiani*, vol. 4, no. 2, p. 154, 2020, doi: 10.33991/epigraphe.v4i2.210.
- [35] Risno F., "Dampak dari Ibadah Online bagi pertumbuhan gereja Masa Kini [The Impact of Online Worship for Today's Church Growth]," 2020, doi: <https://doi.org/10.31219/osf.io/4aqeg>.
- [36] G. Priyowidodo, G. Swestin, and T. NurVidyarini, "The faces of conflict in a political organization: the case of the Indonesia Democracy Party of Struggle (Partai Demokrasi Indonesia Perjuangan PDI-P)," *Mediterr. J. Soc. Sci.*, vol. 5, no. 19, pp. 608–618, 2014, doi: 10.5901/mjss.2014.v5n19p608.
- [37] G. Priyowidodo, "Millennial Generation Conception About Islamophobic, De-Radicalization and Communication Process Based on Multicultural Education: a Phenomenography Study," *J. Stud. Pemerintah.*, vol. 10, no. 3, pp. 208–222, 2019,

doi: 10.18196/jgp.103106.

- [38] B. Bungin, *Post Qualitative Social Research Methods, Quantitative-Qualitative-Mix Methods (Positivism, Post positivism, Phenomenology, Postmodern)*. Jakarta: Penerbit Kencana, 2021.
- [39] R. West and T. Lynn H., *Pengantar Teori Komunikasi Analisis dan. Aplikasi Edisi 3 [Introduction to Analysis and Communication Theory. 3rd Edition Application]*, 3rd ed. Jakarta: Salemba Humanika, 2008.
- [40] S. Hall, *Representation: Cultural Representations and Signifying Practices*. Sage Publications, 1997.

UNDER PEER REVIEW