Communication Patterns and Media Technology Role in Organization and Society During Pandemic

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Abstract
Covid-19 pandemic as the background of the Work From Home (WFH) policy is believed to have increased major participation in communication technology and changed communication patterns. The research aims to know the implementation of WFH during the pandemic, the use of communication technology, the communication patterns during WFH have changed from face to face to Computer Mediated Communication (CMC), and the important factors for the success of WFH. A qualitative method with a descriptive case study approach and a semi-structured interview technique are used. The theory is media richness theory. The results showed that WFH offered advantages and disadvantages for employees and organizations. WFH featured various types of technology/media, from lean to rich. Communication technology plays an important role during WFH which causes changes in communication patterns. Different technologies/media vary in its ability to reproduce messages. During WFH, CMC creates a different climate than face to face communication, because CMC is not as rich as face to face communication. In implementing WFH, even after the pandemic, it is necessary to pay attention to the needs of organizations and employees and the main factors of successful WFH implementation so that WFH can be as effective as working in an office.

Keywords: communication, work from home, covid-19

Paper type: Research paper

Cite this document: Putri, Andhita Vidya, and Irwansyah. (2020). Communication Patterns and Media Technology Role in Organization and Society During Pandemic. *The Journal of Society and Media,* 4(2), 228-261. DOI: 10.26740/jsm.v4n2.p228-261

INTRODUCTION

Currently all countries are shocked by the global Covid-19 pandemic, which is easily and quickly transmitted through human contact or through objects exposed to the virus. President Joko Widodo confirmed the existence of a Covid-19 case in Indonesia on March 2, 2020 and The World Health Organization (WHO) also declared this disease as a global pandemic on March 11, 2020 (Putri 2020).

In response to the crisis, several countries have implemented lockdowns and social distancing policy, including Indonesia, which has implemented social distancing and "stay at home" policies. These policies are in the form of Work From Home (WFH), School From Home (SFH), and worship from home, in order to stop the spread of Covid-19.

One of the highlights of the social distancing policy is Work From Home (WFH). Since March 16, 2020, Indonesia has implemented the Work From Home concept for companies and organizations (Jasmine 2020). Indeed, the concept of Work From Home (WFH) has been the subject of discussion and the theme of global research for researchers in the last 10 years, but this global phenomenon has begun to receive more attention in the arrival of the Covid-19 attack and has become an alternative strategy for many organizations in the world (Mustajab et al. 2020)

The term Work From Home (WFH) was first initiated by Norbert Wiener in 1950 with the term telework, which is also known as telecommuting and remote working (Parthasarathy 2020). In Indonesia, the concept of WFH has not yet become a work culture in organizations. WFH is a new experience for most people and therefore people's perceptions differ. In implementing the WFH concept, several technical platforms are used to ensure that employee productivity and efficiency are maintained.

According to (Parthasarathy 2020), WFH is not a totally new concept, it has been around for over a decade, but the sudden coronavirus pandemic makes it a coercion, not an option. The corona virus pandemic is forcing governments and corporations around the world to switch to implementing WFH. (Glass & Estes, 1997; Kelly & Moen, 2007) in (Leslie et al. 2012) which refer to it as Flexible Work Practices (FWP) also states that in recent years there has been a dramatic

increase in the prevalence of WFP practices that allow employees to control when, where, or how much they work. In line with this, (Jasmine 2020) argued that WFH is an implementation of an open workspace where work is more focused on activities and results rather than work space. This means that somebody is allowed to work anywhere or from anywhere without having to have a specific work space (remote work), including at home. Even so (Hope 2020) stated that WFH makes a person have to remain responsible for their work so that Hope provides some tips in implementing WFH, namely making clear boundaries between work and home, using available equipment and setting boundaries with family members. In line with this, (Lane 2020) said that the success of working from home can present unique challenges, namely how to focus on distractions at home so that you can be productive. Therefore, the practice of WFH / FWP in business must pay attention to strategy, staff size, and the nature of competition (Grobler and De Bruyn 2011).

(Leslie et al. 2012) resumed that WFH / FWP presents a win-win situation that provides simultaneous benefits to employees and the organization. Agreeing with this, Chimote and Srivastava (2013) in (Jackson and Fransman 2018) proved that reducing attendance and turnover can increase productivity and image and ensure loyalty. (Bai et al. 2020) also found that companies with high WFH index earn higher return on equity per share with lower return volatility, and better financial performances during pandemic. On the other hand, (Mustajab et al. 2020) denied this by stating that the productivity of most WFH employees decreased due to lack of work support facilities such as computers, internet networks and the presence of family disturbances and feeling bored because they were in the same environment for a relatively long time because restrictions on social life. Cooper and Kurland (2002) and McCloskey (2001) in (Jackson and Fransman 2018) also agree with the negative impact of WFH, namely that social isolation and decreased social interaction from being away from the office and from colleagues can have a negative effect on job satisfaction. In line with these studies, (Chong, Huang, and Daisy Chang 2020) argued that telework which demands workers to respond quickly and adaptively can trigger stress and emotional exhaustion. In (Cardenas 2020) research, it is found that informal, low educational, and migrant workers would be the most affected by WFH policy in developing countries.

Based on the debate and opinions about WFH from the previous studies, this study focuses on the communication and the use of information and communication technology which are believed to be have important role to support WFH during the pandemic, even though (Mungkasa 2020) divided three primary concepts of WFH, namely location/place, time/schedule, and the use of information and communication technology.

Although the Covid-19 pandemic has significantly changed normal activities globally, we should be grateful that this pandemic occurs in today's digital era. If technology is not as sophisticated as it is now, we can imagine how we can carry out our lives, our work, and so on. We believe the mandate to stay at home, work from home, and school from home has led to a huge increase in participation in information and communication technology.

This new societal culture highlights the basic and important role of the internet as part of the development of information and communication technology. In Indonesia, the Indonesian Internet Network Providers Association (APJII) recorded an increase in internet traffic during the pandemic by 15–20% (CNBC 2020). The Minister of Communication and Information, Johnny G Plate said that there were changes in the use of the internet in urban areas as a result of the Covid-19 pandemic, namely a shift in internet use to residences, housing and settlements as well as an increase in internet data usage by around 5% to 10% and one of the largest telecommunication service providers also recorded an increase in broadband flow during the Covid-19 pandemic by 16%. Besides the internet, during the implementation of restriction policies due to the pandemic, smartphones also played an important role in people's daily lives (Sabron et al. 2020). At the beginning, mobile technology, in the form of mobile phones, smartphones, tablets and notebooks, made our lives better than ever, which in turn increased mobile data traffic to a greater extent (Sethi and Paramita 2016). Social media during the pandemic also plays an important role. According to Shin et al in (Lin, Li, and Wu 2015) social media is an internet-based platform that emphasizes human interaction and is the result of the development of new internet-based web technologies, which eases individuals to communicate, share, and form online network community without meeting face to face.

In this condition, communication between employees can only be carried out remotely and online. (Hope 2020) mention tools that allow remote meetings are Skype, Team, Adobe Connect and Zoom. Cisco, at (Parthasarathy 2020), offers unlimited free use of the 'Webex Meeting' conferencing tool to help users stay connected and support work from home besides other free tools such as Zoom, Skype, Google Hangouts or FreeConference. According to (Yang and Meals 2014), several online platforms that facilitate the development of remote conferencing are Skype, Slack, Zoom and Google Hangouts Meet and the Microsoft team. In addition, shared files on Google drive are useful for collaborative online work. Application such as WhatsApp also facilitates other aspects of real-time communication with colleagues (Lopez-Leon, Forero, and Ruiz-Díaz 2020). These facts show that technology cannot be ignored and the internet plays an important role. In this condition, data and information digitally distributed among employees also becomes an important issue in term of data security regarding to unprotected company data and information (Budhiekusuma, Hadi, and Winarno 2017).

The phenomenon that occurs in society shows that Information and Communication Technology (ICT) plays a very important role in every aspect of life during the pandemic compared to normal conditions. It allows for every aspect of life run, enable large groups of people to work and study from home, increases social connectedness, provides much-needed entertainment, and so on.

The Covid-19 pandemic has also forced employees to work and meet through online media. During the pandemic, communication in organizations that is usually carried out conventionally by face to face, becomes communication which is carried out using communication technology or media that penetrates the dimensions of space and time. Of course there is a difference between face to face communication and communication mediated by technology or communication media. The use of computer-based technology which is supported by the internet as a communication medium is known as the concept of Computer Mediated Communication (CMC) which was first introduced by John December (December 1996). The CMC concept discusses how humans can communicate with others using an intermediary in the form of a computer-based device (Setiawan, Zulkarnain, and Nurjanah 2020).

One of the most popular CMC models is the media richness theory (D'Urso & Rains, 2008) in (Knapp and Daly 2011). Initially, media richness theory was understood in organizational communication settings to better understand interactions within the company and was developed to describe and evaluate communication media in an organization (Daft and Lengel 1984). Media richness theory is used to determine the best media for individuals and organizations to communicate messages (Rice 1993). The term rich media is often used in literature to signify multimodal media or larger bandwidth, namely communication media that supports various verbal and nonverbal signaling systems (Knapp and Daly 2011). Media richness theory states that all communication media differ in their ability to enable users to communicate and change their understanding (Dennis and Valacich 1999). According to (Daft and Lengel 1984) and (Knapp and Daly 2011), media richness is a function of characteristics that include the media's ability to handle various message cues, facilitate quick feedback, utilize natural language, and personalize messages (i.e. to what extent messages can be made for specific individuals).

Regarding the communication pattern and behavior in the CMC concept, apart from discussing the communication media, it cannot be separated from the parties involved in the communication process (Hapsa, Wahyudin, and Zein 2019). The CMC pattern also has impacts on psychological, social and economic side of the communities (Arnus 2015). For this reason, organizations and people inside the communities must adapt to this condition (Dubey and Tripathi 2020).

In practice, WFH certainly has advantages and disadvantages depending on the perceptions of each individual, worker, community, company, and government. Therefore, the implementation of WFH presents a unique challenge on how to maintain good communication with team members while separated by space (Lane 2020) and how to adapt to information and communication technology. The application of WFH also has an impact on communication and collaboration among workers.

Work From Home has also changed the work methods and culture in many organizations. In implementing the WFH concept during this pandemic, many issues have arisen. The most important issue is how to carry out coordination and communication effectively and efficiently, while every employee works on

different time and place. Of cource in this condition, the role of communication technology becomes very meaningful. Therefore, this study aims to find out how is the use of information and communication technology by employees during WFH, how communication and interaction patterns between employess change from face to face to technology mediated communication/*Computer Mediated Communication* (CMC) during WFH seen from media richness theory perspective, what are the advantages and disadvantages of implementing WFH and what important aspects and factors need to be considered in implementing WFH.

The research findings are expected to answer those questions and offer new view on how the implementation of WFH during Covid-19 pandemic situation, how communication technology take part in WFH and how communication pattern change from face to face communication to technology mediated communication/*Computer Mediated Communication* (CMC) during the implementation of WFH in the perpective of *media richness* theory. In addition, this study is also important in term of providing explanation on how WFH policy should be conducted in the future and whether an organization should continue this WFH model on the new normal or vise versa.

Previous studies discussed, the CMC concept dan media richness theory mainly on the common task contexts of organizations. Compared to these, the novelty of this research is that it provides new view about the CMC concept and media richness theory in the context of Covid-19 pandemic. Besides, former studies which discussed effects and challenges of WFH during pendemic paid more attention to management and psychological perspective. So, the next novelty of this study is the presence of description and explanation about the implementation of WFH during Covid-19 pandemic from the perspective of technology and communication (particularly from the perpective of CMC concept and media richness theory).

METHOD

This study uses a qualitative method with a constructivist paradigm, because the understanding of reality in this study is a product of the interaction between the researcher and the subject of the study. A qualitative method with a descriptive case study approach is used in this research as it aims to describe a

phenomenon or event in depth so as to obtain a complete picture of a phenomenon that occurs (Eriyanto 2018).

The sampling technique was taken purposively, and the research subjects were The Head of Regional Office, Head of Sections and Employees at the Ministry of Finance (identity needed to be maintained), and STAN (State College of Accountancy) Lecturers (identity needed to be maintained) who met the criteria of the research, namely undergoing WFH and obtaining WFH experience directly and are considered to be able to describe information in detail and rich.

Given the conditions of the Covid-19 pandemic, direct (face-to-face) interviews are very unlikely to be carried out, so in-depth interviews are conducted by telephone. Researchers use research questions and use semi-structured interview techniques when conducting interviews. The list of interview questions was compiled based on related literature so that researchers can ask general questions and develop these questions based on informant responses and allow informants to freely provide their views or opinions. Researchers also made notes of information from the interview. After conducting the interview, the results were transcribed, coded and then the coded results were analyzed. The analyzed data was then validated using the checking method/members checking.

RESULTS AND DISCUSSION

a. Utilization of Information and Communication Technology in the Implementation of WFH

It is inevitable that before discussing technology and communication in WFH implementation, we need to know how the perception and meaning of WFH implementation is for those who run it. For most informants, WFH is currently being carried out because of the Covid-19 pandemic.

> "WFH is being carried out because there is a covid pandemic. So, because there are social restrictions while we are also obliged to continue working so then there is a policy that we have to work from home" (informant 1)

> "But we are still working, so we are working at home, not be unemployed at home, right?" (informant 3)

Based on the data, the implementation of WFH is to keep working, but the work is done at home. This shows the awareness of officials and employees that the WFH they run is not just at home and relaxing without working, but is also committed to continuing to work, as a substitute for working in an office due to the Covid-19 pandemic. The meaning of WFH can be defined as the completion of tasks far from the usual office location (Teo et al (1998) in (Mungkasa 2020).

Regarding information and communication technology, all informants said that information and communication technology was the main factor for the success of WFH.

> "So the availability of technology is very important during WFH" (informant 1).

> "Technology will be even more important when WFH and the coming new normal" (informant 2).

> "Yes, technology is very important, if I am asked to give points, I will give 100. Very important, very important, without technology, how do we do WFH, just like before, for example, we don't have a smartphone, what do we do, then if we don't have a laptop but only have a cellphone, it can only be used for recording our presence. Then if we don't have a laptop, how we open the work. Don't have a laptop, or only have an old cellphone, for example, how to communicate through WhatsApp (WA), because people who have cellphones without WA, can't do their WFH. The point is that you at least must have a cellphone/smartphone for recording your presence" (informant 4).

It is undeniable that information and communication technology plays a very important role as the main heart in the implementation of WFH during this pandemic. The succesfull of communication and information technology implementation is also supported by the speed to adapt of the users. Based on the data, most of the informants in the study adapted quickly and well in utilizing communication technology.

> "It's easy because before WFH we used to use WA, chat/text, and video" (informant 1).

> "Yes, because there are no baby boomers, everyone is easy to adapt to technology" (informant 2).

> "Yes, the adaptation is fast because I can't ask for help. Yes, I made it by myself. So, if I don't have a video lesson, I usually use a power point then share it to the WAG and then I use a voice note to explain it. I'm self-taught" (informant 3).

There is only one informant who stated that it was rather difficult to adapt to technology in the implementation of WFH.

> "We have to turn on our cellphone, we have to wear uniform, meet up, later use an application that shows our face, I don't know what the application is. I don't understand. I am very clueless. I am confused, 'hah, the question is for me', 'Come on, Mr A, I don't understand' (laughs) "Yes, I don't understand. Just that once" (informant 4).

Other than informant 4, other informants had the opportunity to talk about colleagues who are unable to adapt to technology.

> "One more, 2 years toward retirement, graduate from high school, during this time at home and is assisted by his son" (informant 1).

> "There are a lot of people who can't use the Zoom meeting application because of the many baby boomers. But on the other hand, I see that he was happy physically several times. The highest leader in there is indeed more than 60 years old" (informant 2).

> "Usually, those who refuse technology are, my apology, already a bit older" (informant 3).

This shows that a person's age and education directly or indirectly underlie one's attitudes and behavior in adapting and utilizing information and communication technology during the implementation of WFH. In addition, comfortness is also a consideration. If someone feels uncomfortable or unaccustomed to using technology or media to distribute messages and thinks that learning the technology or media is more difficult and inefficient, then he or she will choose media that is more comfortable for him or her.

Various information and communication technologies as well as social media used to facilitate communication during WFH are described as follows.

> "So the order is Whatsapp chat, then call, video, the WA video call is actually under Zoom. Yes, Whatsapp call. So far, more by WA, WA call and WA video. Why use Whatsapp chat/text, because in a group usually use chat/text. There are economic considerations too. Maybe some cases need confirmation or need to be explained again. If it is difficult or took too much time to explain by words so we use call. Then the Zoom was usually used for meetings. The video call is for conditional purposes only. Email to send data. Yes, it is very helpful, fortunately there is Nadine, you don't need letters. Just sign directly there." (informant 1).

"The Ministry also facilitated it. So, before WFH we used Nadine's e-office. Then, technologically we are helped by the Zoom. For personal ones, for example, there are slides that must be sent, we use email. Using Whatsapp is also still running" (informant 2).

"So far, communication with students, friends, and direct superior is also via Whatsapp. For communication only, yes, communication via Whatsapp group. But if there is anything that needs to be asked and to be discussed more, I usually use telephone. But of all that the most comfortable is actually Zoom. Zoom is so comfortable. It is very easy to share the screen and share PPT. The weakness is if we don't have a paid account, the time is limited" (informant 3)

"Using Whatsapp, the details are clear. If we have urgent cases, WA is sometime not read, so we use phone call" (informant 4).

During the pandemic, there are many applications that provide means of facilitating communication in implementing WFH. Zoom as an audiovisual software becomes an application that masters various jobs and online distance learning. Based on data, almost all informants use Zoom, because Zoom is one of the most frequently used video communication applications used by the public at this time since Zoom can accommodate up to approximately 1000 people in one meeting. The use of Whatsapp social media which is considered to have complete features in the form of chat/text, audio, and video was also used by all informants, indicating that social media also plays an important role in communication and coordinating work during WFH.

The Internet plays a major role in supporting WFH, electronic teaching, gaming, video streaming and many more (Favale et al. 2020), especially during this pandemic, as stated below.

"The important things for WFH is two, smartphones and laptops, yes three I mean, smartphones using the internet" (informant 1).

"Yes, WFH won't work if the internet is all down, yes, we certainly can't work, so WFH has to be supported, you know, you have to be supported by a good internet, a gadget that has good applications, if not we won't be productive. If there is no internet, we can type but we can't send it" (informant 2).

From various information and communication technologies, it is necessary to realize that the main heart of information and communication technology in implementing WFH is the presence of the internet. WFH cannot run if there is no internet. The Internet allows people and things to connect anytime, anywhere,

with anyone and anything, ideally using any line / network and any service (Sundmaeker et al. 2010).

Given the importance of the internet in implementing WFH, it is of course a major consideration in obtaining the quality of the existing internet network. Most of the informants stated that there was no problem with their internet signal. However, this does not apply to people who are far from the city center.

> "Children have a variety of signals, if they are in a big city, they can catch it. For those in remote areas are rather difficult. Even in Pekalongan sometimes doesn't catch on (laughs). How about those who live outside Java, right?" (informant 3).

Inequality of internet and geographic access due to geographical location (Jackson and Fransman 2018). This factor will certainly become an obstacle and a barrier to the smooth implementation of WFH. Another important issue for some informants was related to the use of information and communication technology, the internet in particular, namely data security.

> "For the time being, what you need to think about is data security. Because everything is by the system now, we use Nadine, we use Zoom and then email" (informant 2).

This shows that WFH carried out with information and communication technology or infrastructure supplied by each employee is very vulnerable to data security, compared to using information and communication technology or infrastructure provided by the office.

b. **Communication and Interaction Patterns Among Employees in Organizations Mediated by Information and Communication Technology (CMC) during WFH**

During the pandemic, WFH was the background of changes in communication patterns between one to another. Communication, which was initially established face to face, turned into mediated communication with information and communication technology or Computer Mediated Communication (CMC). Based on field data, there are several advantages and disadvantages of communication with this pattern.

"I can not communicate directly. The communication is usually conducted only by telephone or chat, chat, so we don't know our counterpart's expressions. If we want to explain something, let's say we need to see it in person, we can't check it directly. Words can't represent what's on the mind, for example, here's how to apply it. It's hard" (informant 1).

"So, when we met, personal touch communication approaches were very good, in my opinion. In order to take policies, guidance. When we meet, it is actually easier than virtually to encourage someone. It is very different when we were angry directly with virtual, right?" (informant 2).

"Because in my opinion it is different. When I teach ofline I feel that I can transfer good values to them in real terms and are more up to date than if I convey to them online. So, I feel the difference is that during this online learning, I haven't transferred many good values to them." (informant 3).

"What is somewhat of a problem is that the transfer of knowledge. There are some learning subjects that are better delivered offline, such as teaching them a journal (accountancy). Teaching them to / a journals just by talking feels uncomfortable, right? We used to write on the blackboard, I used to teach using charts, you know, while in PPT we don't use them, now I feel 'how do I explain the journal to you'. 'If I just say voice notes via WAG, do you understand?" (informant 3).

This result reflects that in technology mediated communication, it is difficult to transfer meaning to other parties, because online communication is very different from direct communication (face to face). In addition to the difficulty of transferring meaning to others, research found that with CMC, informants had difficulty to explore the meaning of messages conveyed by others.

"Can not explore emotional feelings via online" (informant 3).

From these expressions it can be concluded that CMC is different from face to face communication, because CMC cannot perfectly facilitate the delivery or reception of meaning from both the communicator and the communicant's side.

However, for some informants, this CMC made them feel free to communicate about anything at any time.

"We don't need to hesitate, we don't know if the are angry or anything, just give them tasks" (informant 1).

"Maybe communication without face to face reduces feelings of embarrassment. So anytime they discuss it anytime" (informant 2).

Lack of awareness of other parties and decreased politeness, friendliness, empathy or the lack of ability to cut uncertainty is caused by the lack of non-verbal sign/cue systems due to the capacity of communication technology in CMC (Culnan and Markus) in (Arnus 2015). What is unique, this study found that the condition of decreasing embarrassment in CMC communication does not apply to someone who communicates with the opposite sex.

> "When writing a journal, we need to chat/talk with people. Now, if online, sometimes we hesitate to have a chat/talk, for example, if we want to chat with a male friend, I feel uncomfortable with his wife. Because it's different. When we are chatting/talking in the office, it is something usual because we're in the office, but if it's an online chat, such as phone calls for hours, it doesn't seem good right?"(informant 3).

> "So, at that time there was a feeling of embarrassment. She was also embarrassed when she was called, especially with WA calls, video calls" (informant 1).

Informants with different gender feel hesitate when communicating with others through computer mediated communication (CMC).

> Apart from the above findings, there are also the following unique findings.

> "We can anticipate the chat disruption, right? If I don't want to be disturbed by the chat, so I turn it into silent mode. That's what we do. So, we can customize the technology, we can turn it into silent mode. If in the office there is a secretary who comes, Sir your're called or if you got a phone call, you can't refuse. If we really don't want to be disturbed, we turn all of our phone into silent mode. We won't look at it in an hour and then check later" (informant 1).

> "If there is a disturbance, we can answer it via WA, if an unimportant private message, we just leave it" (informant 2).

This shows that the CMC character of some asynchronous communication media provides the opportunity for message recipients to control their communication, and this can reduce the pressure on the immediate giving of feedback.

Then, with the development of technological advances, for example online video conferencing, it allows parties to look at each other's faces through communication media and create a social presence so that they can pick up on non-verbal cues, sensory and socio-emotional cues, similar to meeting in person direcly (Arnus 2015), (Nehls, Smith, and Schneider 2014) and (Gunawardena

1995). This happens because in some communication media there are audio visual services provided to its users.

> "Students turned out to prefer Zoom too because they felt like they were in class. They said they could see lecturer's face. They are happier because they can see visually" (informant 3).

The technology media that displays audio-visual services proves the existence of benefits that make users feel the presence of the party being invited to communicate even though they are separated by distance.

On the other hand, although audio-visual communication media can present someone even though they are far away, but the emotional feeling (feel) when communicating through the media is not really felt or is not sufficient for the informants.

> "We can't really feel it if we coach virtually" (informant 2).

> "Like I teach students (online), when I talked, the students maybe can't get the feel just like when I teach directly. When I told them about parents, my motivation to enter STAN or stories about old people directly, they could cry, even boys could cry. But when online it's not like that. So, it's different, even though you can stream or whatever, it feels different. You can't replace the feeling with the aura" (infomant 3).

Besides not obtaining emotional feelings (feel), all informants stated their need to meet other people directly as follows.

> "Not obtaining physical presence, there is a lost sense, right? We are social creatures too. So, if we are in the office, we can call other officials or staff and managed a meeting, but right now, we only see a small face on the laptop screen, right?" (informant 2).

> "What is missing is perhaps the most direct communication with superiors and subordinates. Usually when in our office we have meetings, we can have a joke, yes social relations, social contacts. What is certain is that the direct relationship we meet with our friends, our superiors, is then replaced through Zoom or WA or chat, of course different. After all, we are social creatures" (informant 1).

> "Yes, and it can't be bought. Physical togetherness can't be replaced, in my opinion, it can't be replaced by online. However, we also need to meet the community, be social" (informant 3).

> "If We are at home, we are individually, while in fact we are social creatures. Humans are social creatures, not an individual, in their own terms. We have to socialize, now that is what is missing" (informant 4).

Communication with the concept of CMC has changed the pattern of communication, from face to face to be mediated by technology, thus changing the nature of human interactions physically and psychologically, from real encounters to virtual unreal encounters. The findings in the study show that CMC in WFH causes a lack of socialization between humans, even though humans are social creatures who need to socialize.

The findings regarding the advantages and disadvantages of CMC communication in WFH are presented in the table 1.

Table 1.

Advantages and Disadvantages of CMC (Computer Mediated Communication) Communication in WFH

CMC	Advantages	Disadvantages
Description	- Can feel like presenting someone even though it is far away - Give opportunity to message recipients to control their communication, reducing the pressure on the immediate giving of feedback	- Reducing the chances of someone catching communication cues/sign because of the lack of non-verbal cues - Difficulty conveying the meaning of messages conveyed to others - Difficulty exploring the meaning of messages conveyed by others - Make someone feel free and do not hesitate to communicate about anything and anytime - Do not get emotional feelings (feel) in communicating - Makes less socialization between people - Raise individualistic and egoistic attitudes in the long run

Source: Researchers' Analysis

Although there are some deficiencies in the communication patterns of CMC in WFH, informants conveyed several communication strategies in implementing WFH.

"So, for the smooth running of our work, we have a group or a section group. There is a field group, there is also a field group with Regional Office Chief. The strategy is usually every morning I greet the section group. I gave today's assignment in the group" (informant 1).

"Daily video conferencing with Zoom is part of a communication strategy to make employees not out of control that we do. So, the work of each field is new, there are lots of new jobs or something that we think needs to be shared with other fields, our Quality Control Team and after that a post test is made. We have a WA group with stakeholders, then we also invited these stakeholders several times to Zoom meetings" (informant 2).

Several communication strategies in the implementation of WFH include regular and consistent communication so that communication patterns are maintained with all colleagues and stakeholders. It is also necessary to ensure that there is established communication between employees in the organization with various strategies. Therefore according to (Mungkasa 2020) the company needs to implement an evaluation of worker behavior and worker communication.

c. **Strengths and Weaknesses of WFH Implementation and Important Aspects and Factors in WFH Implementation**

During WFH, all informants felt many benefits and advantages.

"We meet family all the time, then we also don't need to pay for going to the office". In fact, at home, we are more focused on WFH than at the office. We just have many things in the office that we have to solve. It often that suddenly a friend comes to talk to disturb you. Then there will be extra meetings, such as for competitions and extracurricular work" (informant 1).

"Work from home means that people can do work at home, wake up, can clock in, then work at home. But it makes work more effective because there are no unnecessary chats, right. Because we did the vidcon for a while, then we did a lot of work. In the office, sometimes people who don't have a job, just hang out, play to the next room" (informant 2).

"Yes, I think it is good to have WFH. It's just nice, comfortable, because we don't need to rush and got tired to the office, right?" (informant 4).

"So, with this WFH, I personally, as a mother and as a wife, feel grateful because I can do work on the one hand to fulfill my obligations as a civil servant as a lecturer and on the other hand I can do my obligations as a mother and as a wife better. Compared to the days when I have to go to the office." (informant 3).

This shows that even though working in WFH conditions, it also provides many benefits and advantages for those who run it, including always being able to gather with family, balance between family and work, being able to focus more on work, not having to attend directly at the office, and increase productivity at work.

> "Productivity increases during WFH. Because I always believed that if someone's needs were fulfilled, he or she would be sincere" (informant 3).

> "During this WFH, my subordinates produced a lot of results" (informant 1).

This shows that the increase in productivity at work experienced by most workers while running WFH is motivated by the presence of comfort, satisfaction and the fulfillment of Work Life Balance (WLB) needs in the implementation of WFH.

Various positive impacts of WFH in term of the presence of comfort by always gathering with family so that they feel they have a work life balance did not apply to employees who run WFH not at their homebase and do not gather with family.

> "Most of our employees when they work from home, they live in government houses or boarding houses. They, in quotation marks, do not get the benefits as big as those who work from home who gather with their families". "For now, because we are doing WFH forcibly, yes, the benefits don't seem too obvious for people who are far from homebase." (informant 2).

> "Yes, maybe it's different, if the WFH isn't on the homebase, it's like friends at the boarding house, they don't feel the excitement". (informant 3).

Another finding in the implementation of WFH, which might be considered a weakness is regarding the working time during WFH. All informants stated that with WFH, their working time were longer.

> "WFH actually works full house, in home, so sometimes we even work full. After working hours we still work. If in the office there are limits on office hours, and then go home. Although WFH, we have to show our presence. We also stay in one room. We don't need to move anywhere and sometimes if there is work that hasn't been completed, we'll finish it." (informant 1).

"In fact, I think WFH's working hour is 18 hours. It's not 8 hours, because at 10 pm sometimes we still get texted, because everyone is at home so they keep working. So, in the past we had to work at 7pm or 8pm only if there is samething urgent. But now jobs are running until late at night. That's why the laptop is perched on the table in the room just in case there's something we have to check. 24 hours standby" (informant 2).

This research found that, in the implementation of WFH, although working at home, it turns out that officials and employees work full time, not only from 08.00 - 17.00, but they can work 18 hours, even full or non-stop having to standby with various office jobs. The findings regarding working hours during WFH, where an increase in the number of hours worked during WFH are also a background for increased productivity, on the other hand, do not apply to female informants who are approaching retirement age.

"It's not every day I had jobs to do. Like in the office, actually, I do not work everyday, so if I am at home, WFH makes me feel comfortable. More work while I am in the office. If I am in the office I have a high activity, there are people and meetings to be managed. Yes, at home, there is no meeting, there is no consumption, so there is no tuition fee, so there is no work". "At home, I have plenty of time to do anything. So, I wait until 10 a.m to check WA, to see whether there was a job to do or not" (informant 4).

In addition to the above factors, according to the informant, the implementation of WFH is also beneficial for office operational costs and the use of office facilities and infrastructure as follows:

"Yes, everything is paperless" (informant 1).

"But, for internal we use Nadine, so cost of paper is reduced. In addition, because only 1 or 2 employee who should stand by at the office, the electricity cost decreased" (informant 2).

This is also consistent with research findings (Mungkasa 2020), which states that the advantage of WFH is a decrease in paper use while the drawback is the unavailability of adequate internet quality. This study, which found that the implementation of WFH was beneficial in making office operational costs more efficient, due to the decrease in paper, electricity and internet usage, turned out to be very contradictory to the implementation of WFH related to informants' personal costs in term of the increase in personal expenditures.

"Maybe if the calculation is done, in the end the cost is the same. Before, we use office electricity, the office network and then we move to our houses, we use our own electricity, our own quota, that might also be for the shortcomings" (informant 1).

"Yes, there is an extra cost that we pay for data packages, which we usually only have 100 thousand per month, now almost 400 thousand for work" (informant 2).

"Then we need quota, the quota is related to funds, not all students have sufficient fund" (informant 3).

Based on the description above, it can be concluded that the advantages and disadvantages of WFH are motivated by the context, situation and condition of a person in undergoing WFH and the people around them. And broadly speaking, the advantages and disadvantages of WFH are presented in the following table.

Table 2.

Advantages and Disadvantages of Work From Home (WFH)

Work From Home	Advantages	Disadvantages
Description	- There is a work life balance between family and work - Can always gather with family - Can focus more on work - Lack of interference from outside parties - Increase work productivity - No need to attend directly to the office - Paperless office facilities and infrastructure - Reduced office operating costs	- The working time is longer - Saturated and sad if not at homebase with family - Personal expenses increase due to the use of additional infrastructure (laptop, electricity, internet) during WFH

Source: Researchers' Analysis

From the review at table 2, it is known that the various advantages and disadvantages of WFH. Then, what if WFH becomes the new normal after the pandemic?

"Still WFH but not WFH all the time. Maybe the ideal is a week of WFO, a week of WFH so when there is a WFH moment, the next week we can go to the office to do it" (informant 1)

"WFH can be a new work culture but it's not 100 percent like that. Yes, we have to see it later, because we are imagining what we will do in the future. But if we imagine there are private companies, for example researchers, can they do research at home but at the time of the presentation they came, yes, but if we don't understand, we just use Zoom or have to come." (informant 2).

"It's better to mix, WFH and WFO. 3 days WFO 2 days WFH, so we won't get bored" (informant 3).

"Actually, it's like Google's office, Google is just a job, it doesn't have to be in the office, right? People want that now. So, you don't have to work in the office but you still have measurable productivity. Yes periodic. For example, he has a job, for example, the target is 1 month to finish the concept, right? Where does he want to do it, where is the important thing for a month, the concept becomes the output. They can work from everywhere" (informant 4).

Based on the data, it is hoped that WFH can become the new normal after the pandemic. The hope of continuing to implement WFH is due to the many benefits that have been obtained from this implementation. In addition to the increased productivity felt by officials and employees, WFH has also provided many benefits, namely a balance between family life and work life.

In the implementation of WFH, what needs to be focused on is that not all job can be conducted through WFH. So, there are other jobs that should be done through WFO (Work From Office).

"In my opinion, analytical work can be done at WFH. But there is a job that is coaching and monitoring that WFH can't do. Yes, if the service related job cannot be delivered to WFH, it must be in that office because there is an office application that cannot be brought home, so whether you want it or not, you have to do WFO. When asked about all jobs, during this pandemic everyone was forced to be online, but the results were not optimal, especially those with guidance" (informan 1).

"All analysis job can be done at home. What WFH can't do is support jobs, for example administration, housekeeping, security guards supervising, electricity checks, there must be someone to move this. The security guard driver can't be WFH. At the front office, because carrying out important functions is not allowed by WFH because if it is broken it is hacked" (informant 2).

"If online teaching is possible, yes, although not perfect, it can be done. Like scientific publications, they can be online, although for certain publications they have to start with research. All of the research can't be online, right? We have to observe it at the research site, now that means that there are those that can be online, some cannot. Then, like community service, we can't go online because of community service, we have to come to the object. If there is assistance, for example, assistance in preparing PDAM Bekasi financial report, for example, yes, that is what we have to go there which cannot be done through WFH" (informant 3).

"For example, person in charge for HRD can make regulations and training programme from home. Some physical activities, for example building repair can be done from home. Office Boy can not do their job from home" (informan 4).

In the implementation of WFH, there are jobs that can be carried out by WFH, but there are also jobs that are not optimal by WFH. Information on this is shown in the following table.

Table 3.

Job Mapping of WFH (Work From Home) and WFO (Work From Office)

Condition	WFH	WFO
Description	Analysis, teaching, scientific publications, rule making, education and training	Front office, service, supporting (administration, household, driver, security guard, cleaning service), coaching, monitoring, research assistance, community service

Source: Researchers' Analysis

Besides the job mapping, the data also describe the typical people who are suitable for WFH and those who are not.

"So, in my opinion, WFH is suitable for people who are ready for WFH. So, people who are not ready for WFH should still go to the office. The conditions of people that can join WFH after this pandemic is over are good performance, good behavior. So, people whose performance is bad can't be at WFH because they are getting worse. That become an issue for baby boomers because they can't be in WFH, since they work clerically" (informant 2).

Not everyone is expected to be able to run WFH ideally. There are people who are proper to run WFH, namely people who are ready mentally and physically, for example employees with good performance and high commitment. Several previous studies stated that team collaboration is the key to company success (Jasmine 2020) and mutual trust is needed between one employee and another (Mungkasa 2020).

> "What is very important for smoothing WFH, one commitment, two technologies, three our abilities to master technology, and then other supporting facilities for online, maybe the comfort of our workspace. So, the availability of technology and the competence of users and other parties with whom we are connected are very important during WFH. For the productivity of subordinates, it actually depends on the superior, if the leader is creative, he gives the task of continuing to monitor, controlling that he will be productive" (informan 1).

> "Number one is our commitment if we will work well, then discipline. Trust is built with data, which means we don't just believe it, we test it. It really affects our team who work with us in making all work smooth. It is still a problem recently when some stakeholders don't really like Zoom so they still like to invite meetings during this pandemic" (informant 2).

> "The most important thing is the internet, how do you do it if you don't use the internet. Yes, it's very important, wassalam if not there. Communication is very important (laughs), because we don't meet people, we don't meet physically, right? If the communication doesn't go through, how about it. That's why one of the WFH requirements is that we must have a fast response. Commitment too, so make sure that if we are on standby, we don't lose it" (informant 3).

> "Technology is very important. Without technology, how do we do WFH. Don't have a laptop, or just have an old cellphone, for example, how can connect with other by WA, because people who have cellphones don't have WA, can't do WFH. Later, their superiors must be smarter in technology because their superiors judge their subordinates. But there must be teamwork" (informan 4).

It is almost imposible to run the WFH policy without being supported by information and communication technology as well as other supporting tools, for example internet connection, smartphone or laptop, and various social media and application. This corresponds to what conveyed by (Király et al. 2020) that online working and online learning are only possible with the use of information and communication technology. However, it should be noted that the use of information and communication technology will not be succesfull if users do not

adapt quickly during the implementation. The speed of adaptation is affected by the user condition, namely age, education level, gender, and individual self-comfort.

People use various types of media in carrying out work during WFH. These various media represent various media richness. During this pandemic, Work From Home has featured various types of communication media, ranging from lean to rich, where each individual can choose the media that best suits their work style and job at hand. Different jobs may require different types of media. Media richness theory implies that the communicating parties must choose the appropriate media to communicate the desired message or to fulfill a certain task or job. It should also be realized that the use of technology and communication media is very motivated by context, situation and conditions. In different contexts, different information and communication technology will be used, with all its advantages and disadvantages.

The various media and technology used will not be useful without the presence of the Internet, which make the Internet become the heart of the WFH especially during this pandemic. If access to the Internet is uneven because of geographical location, then this should become the concern of telecommunication and network industries to enhance their network quality because the need for the Internet is increasing rapidly. The market for this industry is certainly getting wider so that it provides great opportunities, advantages and competition for the telecommunications and network industry. The importance of this is consistent with the statement (Sethi and Paramita 2016) that in order to make future network technology part of an important social infrastructure, this technology must be researched and developed by considering the following: networks for individuals, networks for communities, and networks for global candidates.

During the implementation of WFH, data security issue is one of the concerns of the involved parties. This occurs because home networks rarely offer the level of data protection mandated by corporate installations (Parthasarathy 2020), so the security of corporate data and information can be threatened (Mungkasa 2020). There are several serious problems related to current technological advances, where the issue of privacy becomes a major issue, namely when the internet expands the number of connected devices integrated into our

daily lives, it will present opportunities for cyber attackers to gain access to our physical world through a security hole in this system (Shin and Jin Park 2017). Therefore, it is very important to have personal awareness of the importance of data security in implementing WFH. Recently, data security is not only the responsibility of organizatios but also the responsibility of every employee. There are many ways to maintain data security, for example by always using official email when sending files about work, regularly changing email passwords, using paid applications, ensuring WIFI is password protected and using the latest version of software.

WFH, which was carried out during the covid-19 pandemic, can also be seen from communication perspective because it is the background of changes in culture and work methods as well as communication patterns and interactions between one person and another in the organization, namely changes in communication, coordination, and distribution of tasks, work and responsible. This happens because the communication pattern that was originally face to face has turned into information and communication technology mediated communication or Computer Mediated Communication (CMC).

During the pandemic, Work From Home features various types of communication media, from lean to rich. Richer communication media support and include non-verbal and verbal cues, body language, tone of voice, and gestures that indicate a person's reaction to a message. Research has found that communication mediated by technology or media such as telephone or chat is not as rich as communication that displays audio-visual or face-to-face communication which includes a multi-sign system. Face to face communication has a multi-sign/cue system, while online communication lacks a multi-sign/cue system. Conditions of communication using less rich media can reduce a person's chances of catching communication signs due to the lack of non-verbal cues, including the richness of relationships that arise from nonverbal signals from the parties with whom he communicates. It is called cues filtered out condition (Berge, 2014) in (Arnus 2015). With this filtered out cues condition, someone finds it difficult to transfer or deliver the meaning of messages conveyed to others and have difficulty capturing or exploring the meaning of messages conveyed by others. This is due to the absence or reduction of non-verbal cues on the CMC during WFH or the absence of direct personal touch, especially if the

communication is made by telephone or chat. Non-verbal cues carry 93% of the meaning of the message (Griffin, Ledbetter, and Glenn 2019). This means that when the non-verbal cues are minimal, it means that the meaning conveyed in the message is also minimal.

Research showed that CMC communication through technology or online media on WFH during pandemic is a media that is less rich because the media is less efficient in solving and reducing ambiguous problems or unclear messages so that it has the opportunity to cause misinterpretation and the media requires a lot of time to convey understanding or meaning.

Communication media that are less rich in fact can also stretch the relationship between communicating parties because CMC communication reduces hesistate and politeness and empathy for other parties when communicating. In this study, a unique finding was found that the decrease in empathy and hesistate in technology-mediated communication or CMC previously described only applies to individuals who communicate with the same sex, but does not apply if communication is carried out with the opposite sex, means that the CMC communication pattern that makes a person feel free to communicate about anything and at any time does not apply to informants who communicate with the opposite sex.

Different types of media require different capacities for direct feedback due to the richness (breadth and depth) of the message. CMC communication via online media is a less rich media mode compared to face to face communication, because it has a deficiency in providing equality of feedback, where the exchange that occurs between the sender and receiver of messages is not simultaneously or asynchronous. Although in practice, the choice of media and all attitudes in controlling the communication depends on how the goals of the user are. Each user has different goals, some use it to seek relationships with other parties, and some others use it with the aim of minimizing involvement with other parties.

Media richness theory is used to determine the best media for individuals and organizations in communicating messages. Different technologies and media vary in their ability to reproduce messages, such as direct feedback and the number of cues and in changing understanding. This makes some media more suitable than others for specific jobs or tasks. For this reason, it is necessary to

ensure the existence of the most appropriate technology and media as well as the established communication between employees in the organization with various strategies.

Communication media featuring audio-visual services such as Zoom meeting allow for more visual cues than just audio conversation. This shows that the audio-visual communication system is a communication that is richer than just audio or text, so that the audio-visual communication system is between text or telephone and face to face in terms of media richness. On the other hand, the audio-visual system of two-way interactive media that supports facial expressions, movements, and tone of voice remains imperfect to satisfy its users, thus creating interaction patterns that are different from face-to-face contexts. Physical closeness in face-to-face communication which includes verbal and nonverbal actions such as giving cues, smiling, humors, vocal variations, and vocals, remains very meaningful psychologically and emotionally for everyone in communication. It means that, although the media and audio-visual communication information technology allows the presence of the party invited to communicate more strongly (even though it is far away), they still do not get the perfect emotional feeling (feel) of communication. This shows that communication through online media is not as rich as face to face communication because it does not feel the presence of other people (social presence) psychologically when communicating. Therefore, face to face media is more suitable for doing work that requires a high social presence, while online media is more suitable for jobs that require a low social presence.

Online communication in WFH during this pandemic caused a person to less socialize with others. If this condition occurs in the long term, it is feared that it will give rise to individualistic and egocytic characteristics. This shows that rich media in the form of face to face communication can improve relationship between the communicating parties become closer, and less rich media, on the other hand, it can loosen the relationship between the communicating parties.

The implementation of WFH during the Covid-19 pandemic certainly has advantages and disadvantages. One of them is increasing productivity. In WFH, the measure of productivity during WFH is no longer based on the presence of someone face to face, but is measured by the height and size of the progress report from work. Here the measure of productivity becomes clearer and more

measurable. Increased work productivity due to no need for time absent from office, more focus, less interference from other parties or less important communication, and longer working time. This is in line with (Chimote dan Srivastava, 2013) in (Jackson and Fransman 2018) that reducing absenteeism and turnover can increase job satisfaction, increase productivity and image, ensure loyalty, reduce stress and improve health. However, the study found that the increase in productivity in WFH during this pandemic was motivated by various factors, as this did not apply to female informants who were approaching retirement age. This is because of the difficulty of adapting to richer media. Difficulty understanding the audio and visuals offered by richer media. From this, it is found that the level of effectiveness and work productivity in the implementation of WFH is motivated by the factors of age and gender as well as the advantages of media that have high richness (rich media) in reducing misunderstanding of perceptions motivated by several factors.

The second advantage of WFH is that it provides comfort in working for those who run WFH. This is motivated by the existence of work life balance at work. However, this study found the fact that the perfection of comfort obtained by employees in undergoing WFH is motivated by several factors. Employees who carry out WFH at the homebase and gather with family may get benefits and comfort, but the comfort of WFH is less pronounced if employees carrying out WFH are not at the homebase or do not gather with family.

The third advantage of WFH is the savings or reduction in office operating costs due to reduced use of paper, electricity and internet in the office. The benefits of WFH for this office are in contrast to the increase in personal costs that must be incurred by employees during WFH due to the shift in use of infrastructure, which originally came from office infrastructure (such as computers, electricity and the internet), to switching to the use of employee facilities and infrastructure. The transfer of expenses from the office to the personal of employees may be used as a background for changes in office or organizational policies regarding shifting of organizational or office budgets from allocated office expenses to additional office employee budgets.

The various advantages of WFH provide the opportunity to implement WFH in the new normal, with the WFH period is adjusted to the scope and needs

of the organization and its employees. What needs to be concerned is that not all jobs can be done through WFH and not everyone can do their jobs through WFH. It needs people with special criteria who are mentally and physically ready to apply WFH.

In the current conditions of the Covid-19 pandemic, WFH provides major changes in the technology, organizational culture, and work communication patterns of people in the organization. In responding to this, the organization and its people inside need to be dynamic and adaptive. All organization and people inside must have a strategy and ability to deal with changes that occur and cannot be predicted, according to what Charles Darwin said, quoted by Dian Budiargo (2015) in (Arnus 2015) that "in order not to become extinct, humans must have adaptive traits". Figure 1 depicts the success factors for WFH during the Covid-19 pandemic.

The successful implementation of WFH must be supported by various important factors above which are adjusted to the organizational culture. With good adaptation and strategies as well as applying principles and factors, WFH can be as effective as working in an office. That way, it is possible for WFH to become post pandemic new normal.

Figure 1.

Success Factors for Work From Home (WFH)

Source: Researchers' Analysis

CONCLUSION

Based on the data obtained from interviews, data processing and researcher analysis, the conclusion is that Work From Home (WFH) as a consequence of the existence of social restriction policies during the Covid 19 pandemic has now become a phenomenon in Indonesia with all its advantages and disadvantages for both individuals and organizations. In implementing WFH during a pandemic, information and communication technology plays a major role. During the Covid 19 pandemic, WFH presented various types of media, from lean to rich. Different technologies and media vary in their ability to reproduce messages. Therefore, the communicating parties in the organization can choose the most suitable technology and media to communicate desired messages or to fulfill certain tasks/jobs. The use of these various media and technologies alters communication pattern, from face to face to technology mediated communication or Computer Mediated Communication (CMC). It is concluded that, in the implementation of WFH during Covid-19 pandemic, technology-mediated communication or Computer Mediated Communication (CMC) communication creates a social climate that is very different from face-to-face communication, because CMC communication is not as rich as face-to-face communication. Although various media are used to communicate, face to face communication remains the richest mode. In the current or future implementation of WFH, we need to consider at least three factors for the success of WFH. First, organization culture, needs, and scope. Second, organization type of jobs and employees. The last one is the organization strategies. By fulfilling these principles and strategies, WFH implementation will be successful and can be as effective as working in an office.

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