Deaf Disability Interaction And Information Space On Social Media Platform

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Abstract – Deaf disability interaction and information sharing space on social media platform means that there are deaf disability-friendly aspects to inclusiveness, through accessibility available on social media as a form of equality as well as the same opportunity to communicate with hearing dominant people.

The concepts applied in this study were New Media and Social Media, which were supported by the theory of media determinism and equipped with the concept of Persons with Disabilities, as well as the concept of Deafness.

This was a descriptive study with a qualitative approach. This study aims to determine the communication process that occurs in social media regarding the benefits to be obtained by deaf people for various kinds of things or motives.

The results of this study found that social media has become a provider of new space as a tool that helps the deaf people in accommodating the need for updating information so that it becomes a space that may reduce the distance between hearing people and deaf people, as well as a medium that becomes a means of activism with the aim of providing awareness about Deaf people and their rights.

Keywords – Information-Interaction, Deaf, Social Media

I. INTRODUCTION

The digital era through the presence of platforms on social media has formed a new reality that facilitates individuals in communicating within cyberspace. The development of information technology has influenced the way humans communicate, which transforms offline activities into online activities, especially in communication activities. Communication is a very important aspect for humans, and every aspect of everyday life is influenced by communication with other humans (Stephen W. Littlejohn, Foss, & Oetzel, 2012).

In this case, social media as one of the internet-based media also has a major role in influencing human life and has the potential to create new life spaces in it. The presence of increasingly diverse and developing social media is currently able to shift and bring new ways of communication for humans that tend to be more open. Thus, it is not uncommon for those who are complacent and carried away by the flow of existing communications, so that they seem to even become another figure who is far different from the real world (Piliang, 2004).

Social media as part of new media has become a new tool in the digital world that comes to provide high – and easy accessibility or attainment of all things, to form methods and ways in the form of new application or media. In contrast to direct communication, the form of communication through social media depends a lot on text, emojis, and other supporting features that can involve users in making contributions and feedback openly, either in the form of comments or sharing information in a very fast to infinite time. This degree of convenience also makes everyone accessible, or can be assessed regarding who, how and where they are as users, including people with deaf disability.

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People with hearing disability have the labelling of communication limitations, both expressively (speaking) and receptively (understanding other people's speech). Deaf is considered by the hearing dominant community as a minority group with obstacles in verbal communication, including in the process of translating to interpreting the meaning in the communication process. Not all hearing people can understand or even know sign language. Sign language is a language or culture of Deafness that prioritizes manual, body language, and lips communication, rather than voice usually performed by hearing people. This language is usually combined with hand, arm, and body gestures and facial expressions to express their thoughts. In face-to-face communication, differences in the use of the language they use with their hearing people often hinder the creation of effective communication. Not only does it hinder the creation of effective communication, the differences in language use between the deaf and the hearing people also make the Deaf - as a minority - eventually be restricted from socialization (Rahmawati, Hafiar, & Karlinah, 2019). So far, the communication efforts carried out have tended to be towards one party only, namely the deaf themselves.

However, social media comes to remove these boundaries. This new media becomes an alternative for deaf people to show that they have equal communication with hearing people or become a tool for deaf community to create more effective communication since social media has an instant messaging feature based on text - writing language. Many studies revealed that the internet had the potential to improve communication and daily activities for people with disabilities.

A study conducted by Bishop, Taylor and Froy (2000) found that Computer Mediated Communication (CMC) via the internet had the potential to overcome social isolation for deaf people. It was evidenced that, despite the disappearance of some forms of nonverbal cues as the power for the Deaf in face-to-face communication, they found it easier to communicate online than face-to-face. In fact, the results of a study conducted by Barak and Sadovsky (2008) showed that deaf people were motivated to use the internet and they usually used it more intensely than hearing people, both in personal and group communication.

Forms of various ways and patterns of communication are slowly being realized through the application of social media. Everyone can exercise their rights, realize their desire for equal opportunity in many fields, especially communication, and also support the government in enacting regulations on the procurement of facilities and infrastructure regarding persons with disabilities. In Law no. 8 of 2016 (in RI, 2016) it is stated that “Persons with disabilities are entitled to equality and accessibility in all spheres of life, including communication.” Furthermore, in the Convention on the Rights of Persons with Disabilities (CRPD) which was ratified and stated in Law Number 19 of 2011, article 30 obliges the state to guarantee the rights and access of persons with disabilities, including those who are deaf, to participate in cultural and recreational, entertainment and sports activities. Moreover, Article 21 states that the state is obliged to guarantee the rights of persons with disabilities, including those who are deaf, for information and guidance.

The dynamic flow of information in an audio-visual media has become a part of the greatest dominance in the life of Indonesian society, including persons with deaf disability. The needs of persons with deaf disability are equal to those of hearing people, where the access they get must be equal, starting from searching for, accessing to reprocessing content and various sources of information. The era of digitalization that brings convenience in all fields should also be a convenience way for persons with deaf disability, which can be realized through communication activities performed on social media.

Based on the description above, the researcher is interested in observing the patterns of communication between Deaf friends on various social media platforms. Furthermore, has social media fully opened access for the Deaf in the interaction and information space? How do they get the information? Are the problems faced by the deaf people in face-to-face communication also existing when they communicate using new media application?

II. LITERATURE REVIEW

New Media

New media is a medium that offers digitization, convergence, interaction, and development of networks related to message creation and message delivery. Its ability to offer this interactivity allows users of new media to have a choice of what information to consume, as well as controlling the output of information generated and making the choices they desire. The ability to offer an interactivity is the central concept of understanding the new media (Flew, 2007: 11-22).

Along with the presence of new media, the phenomena of virtual reality and virtual identity community have also emerged. These phenomena arise because new media allows users to extensively use the space in the new media, expand the network, and show another identity which is different to that of the user in the real world (Flew, 2007: 25).
The main characteristics of new media are interconnectedness, access to individual audiences as message recipients and senders, interactivity, multiple uses as an open character, and ubiquitous nature. As for the difference between new media and old media, new media ignores the boundaries of printing and broadcasting by allowing conversations between multiple parties, allowing simultaneous acceptance, change and re-distribution of cultural objects, disrupting communication actions from the importance of territorial relations and modernity, providing instant global contact, and inserting modern/late-modern informants into a networked apparatus machine (McQuail, 2014).

Social Media

Nowadays, the development of information technology has provided many new opportunities so that knowledge sharing can be carried out even though there are obstacles regarding distance, time and place (Mao, Liu, Zhang, & Deng, 2016: 54). Through various applications and new technologies, information technology can be made into a solution to the various problems explained above. One promising technology is the internet with its social media facilities. Social media enables the implementation of interaction, communication, and collaboration among users effectively, quickly, precisely and relatively cheaply (Hemsley & Mason, 2013: 140).

Kaplan and Heainlein define social media as a collection of web 2.0-based internet application that provides interactive services between individuals and communities to interact, discuss, create and modify content (Kaplan & Haenlein, 2010: 60-61).

According to Soeparno dan Sandra (2016: 26), cyberspace as well as social media is a major revolution capable of changing human behavior today, where all friendship is done through digital media - by using new media (internet) which is operated through social networking websites. Reality becomes augmented and virtual which must be adapted and integrated in the ubiquitous (everywhere) and pervasive (can penetrate various various fields of science and study) perspective of contemporary social psychology studies. The term social media is composed of two words, namely "social" and "media". The word "social" is defined as a social reality that every individual takes action that contributes to society. Meanwhile, "Media" is defined as a means of communication (Laughery, 2007; McQuail, 2010). This statement confirms that in fact, media and all software are “social” or in the sense that both are products of social processes (Fuchs, 2007: 47).

According the meaning of each of these words, it can be concluded that social media is a communication tool used by users within social processes. However, to compile a complete definition of social media, we need to look at the development of relationship between individual and media devices. The characteristics of computer work in Web 1.0 are based on individual recognition of other individuals (human cognition) in a network system, while the characteristics of computer work in Web 2.0 are based on how individuals communicate (human communication) in inter-individual networks. Finally, in Web 3.0, the characteristics of technology and the relationships that occur can be seen from how humans work together (human cooperation) (Fuchs, 2007).

Media Determinism

Media determinism introduced by Marshall McLuhan is defined as a variant of the well-known Information Technology Determinism Theory with the 'the medium is the message' phrase. According to McLuhan, the media used to convey messages is not just a tool, but has a certain role. Society is not only influenced by the "content" but also by the "media" used. Books, for example, have implications for both linear and analytical thinking. Books teach linear thinking because it educates people to think in one direction from left to right (or vice versa). In addition, it also teaches analytical thinking since books are divided into chapters, each of which consists of paragraphs composed of sentences. Moreover, these sentences are made up of words, and words are made of letters. The changes in mindset "taught" by the book have altered the cognitive structure of society.

In line with McLuhan's opinion, Innis believes that the media have an important role in changing society. According to Innis, as quoted by Galvin (in Colhoun, 1995: 180):

“A medium of communication has an important influence on the dissemination of knowledge over space and time. According to its characteristics it may be better suited to the dissemination of knowledge over time than over space, particularly if the medium is heavy and durable and not suited to transportation, or to the dissemination of knowledge over space than over time, particularly if the medium is light and easily transported. The relative emphasis on time or space will imply a bias of significance to the culture in which it is embedded.”

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According to Innis, media are not just the tools. The presence of the media itself has had an impact on the whole process of disseminating knowledge or messages. Each medium has a bias over time and space. Different medium will have different impacts. This is because it is not only the content that has a bias, but also the media. Space-binded media give rise to societies that have oral traditions. One of the characteristics of the oral tradition is the presence of a small group of people who have the privilege of interpreting knowledge. On the other hand, media that are time-binded have an impact on the emergence of a society that tends to be egalitarian which is rooted in a written culture. In this society, everyone has the same right to access to knowledge, so that in such society, there will no longer be a special social class that reserves the right to be the only interpreter of knowledge. Furthermore, Galvin (in Colhoun, 1995: 180-181) mentions:

"Whereas print solved the problem of producing standardized communication rapidly and in sufficient quantities to administer large areas, the development of electronic communication – beginning with telegraphy and moving from radio to television – solved simultaneously the problems of rapid production and distribution."

Technology and/or media are no longer just the tools. They had a non-negligible important role. The decision to choose a particular media will lead to what impact to be caused. McLuhan was right when he said 'the medium is the message'. Media determinism has the following characteristics, as quoted from Dave's Page for Technological and Media Determinism:

1) Medium destroys time and space. (2) The medium is the message. (3) To create a new medium, the old one has to go. (4) Whatever medium is predominant, then that is what the people will be. (5) There exists a drive toward efficiency and speed (6) Childhood is going (disappearance the limit between childhood and adult).

Persons with Disabilities

As Indonesia ratified the United Nations Convention on the Rights of Persons with Disabilities (UNCRPD) which was later translated into Law No. 19 of 2011, in order to encourage ratification of the International Convention on the Rights of Persons with Disabilities, the term persons with disabilities was introduced in a seminar held on 8th – 9th January 2009, which was attended by experts in various fields (linguistics, socio-culture, law, human rights, psychology), representatives of government agencies (among others: the Ministry of Social Affairs, the Ministry of Law and Human Rights, the Ministry of Foreign Affairs, the Ministry of Manpower, and others), observers of people with disabilities, NGOs, and the general public and the meeting has produced an understanding of the importance of replacing the term "persons with disabilities" for the following reasons (Widinarsih, 2019: 135):

1) In the view of the language aspect, the word disabled denotatively has a negative meaning, such as sufferers, deficiencies which lead to poor, disgraceful, defective, and damaged value or quality. The word disabled also has a connotative meaning in the form of humble or negative feelings.
2) The word disabled arises because of the existence of a power (group or state) which gives the word as identity to a group of people who are considered disabled. Disability is actually a social construction, not a reality of one's existence.
3) Philosophically, no one is disabled. Men are created by God in the most perfect condition and with the highest degree.
4) Empirically, the term "persons with disabilities" that has been used so far has resulted in bad attitudes and treatment towards people who are referred to as disabled. Disability is considered as the identity of a person, which is inferior to a person who is called not disabled. Whereas the 'disabled' is not a condition which determines the comparison of quality towards the 'non-disabled'. 'Disability' is not a measure of the limitations of human existence. "Disability" is only a certain condition of humans that lead to the problem of "different ways" at the level of reality when facing life itself, compared to other humans.
5) The psychosocial impact of the term “persons with disabilities” includes: creating social distance, making the subject and the closest people feel guilty, people who are called “disabled” construct themselves as incomplete, incapable, not expected, and position themselves as victims. (Kasim, E.R. 2010)

Since the issuance of Law number 8 of 2016 concerning Persons with disabilities, the Government of Indonesia has established an official definition of who is meant by persons with disabilities in Indonesia along with the categories. This formal regulation serves as a reference and basis for understanding for all relevant parties and Indonesian society about the meaning or definition and categories of persons with disabilities in Indonesia. Law Number 8 of 2016 Article 1 paragraph 1 defines persons with disabilities as:
Every person who experiences physical, intellectual, mental, and/or sensory limitations for a long period of time who during interactions with the environment may experience obstacles and difficulties to participate fully and effectively with other citizens based on equal rights

Deaf

Deaf is someone who has a hearing loss so that they cannot hear sounds perfectly or even cannot hear at all. However, it is believed that no human being can hear at all. Although very little, there are still residual hearing that can still be optimized in a deaf person (Setyawan, 2019: 168).

The term hearing tunarungu (deaf) in Indonesian term is taken from the words "tuna" and "rungu". Tuna means less and rungu means hearing. Thus, deaf can be defined as people who are unable to hear or are less able to perceive sounds (Winarsih, 2010: 105). Experts have argued a lot about the meaning of tunarungu in foreign language, namely "Hearing Impairment" which includes The Deaf and Hard of Hearing (hearing loss). According to Hallahan and Kaufman (in Winarsih, 2010: 105), deaf is a general term that indicates hearing difficulties from mild level to severe level. The deaf classification into the hearing loss and hearing impairment indicates that a person classified in hearing loss experiences a complete loss of hearing acuity, while deaf person who are classified in hearing impairment only experiences a partial loss of hearing function. However, both groups are encouraged to use hearing aids.

Bbcothroyd provides limits for three terms of deaf based on how far a person can take advantage of the rest of the hearing with or without amplification by hearing aids as follows (Rahmaniar, 2015: 45): a) Hearing loss, but still able to use it as the main means/modalities to listen to someone's voice and develop speech skills. b) Deaf people are those whose hearing can no longer be used as the main means of developing speech skills, but can still be used as a supplement to vision and touch. c) Totally Deaf people are those who have absolutely no hearing so that they cannot be used to listen or perceive and develop speech.

III. METHODS

This was a descriptive study with a qualitative approach (Sumarlan, Ashrianto, & Nugraha, 2020: 7). The data collected included data derived directly from the source, wherein the researcher became part of the main instrument of analysis; and data in the form of words in sentences or pictures that have meaning (Sutopo, 2006: 30).

Descriptive qualitative study is a study which presents descriptions from respondents or informants about experiences, knowledge, traditions, philosophies or views of life. The objective of a descriptive study is to describe the things asked in the study through the question words such as who, which, when, where, and why (Umar, 2014: 102).

In a qualitative study, respondents or study subjects are called informants, people who provide information about the data the researcher needs in relation to the study being conducted. The subjects in this study were key informants, namely Bagja Prawira Wiranandhika as a Deaf activist in the field of advocacy, both on social media and real-world reality, and 4 other additional informants, the Deaf activists with an active background in social media as well, namely: Siti Rodiah, Isro’ Ayu Permata Sari, Nissi Taruli Felicia, and Hadyan Mochammad Haeza.

The categorization of the informants in presented in the tabular form as follows:

<table>
<thead>
<tr>
<th>No</th>
<th>Informant Name</th>
<th>Category</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Bagja Prawira Wiranandhika</td>
<td>Deaf (Total – Deaf Gain)</td>
</tr>
<tr>
<td>2</td>
<td>Siti Rodiah</td>
<td>Deaf (Total – Deaf Gain)</td>
</tr>
<tr>
<td>3</td>
<td>Nissi Taruli Felicia</td>
<td>Deaf (Total – Deaf Gain)</td>
</tr>
<tr>
<td>4</td>
<td>Isro’ Ayu Permata Sari</td>
<td>Deaf (Total – Born - Deaf)</td>
</tr>
<tr>
<td>5</td>
<td>Hadyan Mochammad Haeza</td>
<td>Deaf (Total – Born - Deaf)</td>
</tr>
</tbody>
</table>

a. Primary data

Primary data in this study were obtained using written notes from in-depth interviews and observations. In-depth interviews were conducted by asking open-ended questions, which allowed respondents to provide a broad range of answers. Data obtained from in-depth interviews were in the form of experiences, opinions, feelings, and knowledge of the informants. Meanwhile,
observation is a data collection technique to observe human behavior, work processes, natural phenomena and respondents. In this study the researcher made direct observations to find facts in the field.

b. Secondary Data
Secondary data used in research were collected from literature study to obtain relevant information and to find theories that underlie the problems and fields under study. The authors conducted literature study through books, journals, previous researches, and supporting information from the Internet.

IV. RESULTS AND DISCUSSION

Accessibility of the Deaf on Social Media

According to the view of the Deaf, Deaf Accessibility on Social Media is achieved when the deaf has access to communicate and obtain information which then refers to the context of the deaf disability-friendly aspect and inclusiveness. There were found differences in the answers of informants as the objects of the study. Isro argued that “currently social media is not disability-friendly, not all social media can fulfill my needs as the deaf.”

Adding the point expressed by Isro, Siti also agreed that currently existing access to social media was not equal between deaf friends and hearing friends. Then Bagja added through a similar statement related to inclusivity points:

"Social media itself is not yet inclusive, some have tried to be inclusive although there are still things that need to be improved. For example a celebrity made a video without the text and only a dialogue. It is better include any voice, for example: The cell phone rings. That is so called inclusive."

The incomplete inclusiveness stated by Bagja, was then strengthened by Nissi's statement regarding Social Media which was quite deaf-friendly, but it still the same, not yet fully friendly:

"In my opinion, it's already accessible and deaf-friendly, I mean not really friendly. It is friendly enough. I mean, actually it depends by the content filler, for example by including the sound when he or she intends to translate a video."

Basically, to be fully accessible to social media, the Deaf needs two (2) conditions, namely the availability of Sign language and also text (Closed Captions). It should be returned to the goal of accessibility, which makes it easy for persons with disabilities, especially in this case deaf people, in having the same opportunity to obtain communication services, especially information sharing.

These two features should have been included in the content, because not all deaf persons have mastered sign language. Bagja reiterated it in the following statement:

"Deaf people, who have not mastered sign language, need text, because the language is difficult to understand. But if the deaf people have not mastered the difficult language, then they need access to sign language"

Moreover, the researcher asked about the provisions of the fonts that must be provided to fulfill the deaf access in text form.

"Is there any font requirement for the text desired?" "The important thing is the font is clear, whatever the color, but there should not be over-acting letters, the important thing is taht it is clear and legible."

In contrast with the other four (4) informants, Haeza actually stated that social media could be said to be disability-friendly:

"Yes, Social Media is deaf friendly, there is an easy communication. If we meet face-to-face, it's even difficult to communicate."

The author's interpretation of the things expressed by Haeza is that it was due to the limited ability of sign language that had not been adjusted by hearing friends when they meet Haeza, where the communication used full oral. Therefore, it was difficult to understand and social media became intermediary to remove these limitations.

Interaction Space for the Deaf through Accessibility on Media Platform

According to the results of interviews with informants, it was revealed that social media was able to provide a new interaction space for the deaf, where the boundaries of communication were lost, making either deaf friends with deaf friends or deaf friends with hearing friends were connected easily to each other, as revealed by Haeza:
"Interaction space with hearing friends becomes available and open."

The interaction space here means connection, the unifier between the Deaf and other people as active users on social media, this includes for the researchers themselves. To get to know some informants, the researchers were connected and then deepened the characters of the informants through social media. This was then reinforced by key informant answers about the Deaf interaction space in Social Media:

"Social media opens up new interaction spaces for the deaf, where many deaf friends use social media as an interaction space." Why is it called an interaction space? Because the deaf relies on visuals, and now there are usually many, diverse, various visuals on social media. In the real world, communication is usually limited, because hearing friends don't necessarily know sign language, so they form groups between deaf friends and hearing friends. That's why social media becomes a new interaction space"

Information Sharing Space for the Deaf through Accessibility on Social Media Platform

Based on the results of the study regarding the Information Space for the Deaf, the researcher found that 40% of the Deaf used social media as a platform to obtain information, due to the visual strength and also the visual diversity that exists on Social Media, as explained by Bagja:

"On average, 40% of my knowledge is obtained from Instagram, especially the laboratory communication in performed on the media, so I keep scrolling, what is existing, if there is new information. For example, yesterday, I made a journal about the appointment of a new chairman of Corruption Eradication Commission prior to Novel Baswedan's arrest. The study was initially started from Instagram, the study was also conducted based on Instagram."

Related to the information sharing space, then Nissi added on how he understood himself as the Deaf in obtaining information through videos posted on social media, especially Instagram, which then provided additional information, making his social media as a means to spread the value of goodness:

"Before I met my deaf friends, my friends were all hearing friends and we were still hanging out and not serious. But after I met Deaf friends, who were active in fighting for Deaf rights on social media, Instagram turned into a tool for advocacy. I gathered additional information, followed their way of advocating. In fact, I have a concept that social media is an information space when I enter the world of Deaf in the realm of architecture, since there are only a few deaf friends. I want to make this serious realm more fun, bring architecture to be a special good for my own environment, friends of the same generation"

Interactions of the Deaf through Activism on Social Media

Social media as new media with its interactive characteristics has been proven to provide a new interaction space for deaf people. This interaction space is able to eliminate the communication limitations of the Deaf group caused by disability to hear voices or sounds, which are then translated into text visualization forms - written language on social media. The formation of interaction spaces on social media begins when social media users, who are among the hearing people, connect and communicate with deaf people, seeing how activism is about what Deaf culture and Deaf rights are. Activism on Social Media that is carried out by the Deaf themselves is to disseminate information related to the rights of the Deaf, the culture of the Deaf or all kinds of things about the identity of the Deaf which can raise awareness in the community, including among the Deaf themselves.

Interaction of the Deaf as a Form of Self Disclosure

An analysis can be drawn, that the Deaf group uses social media as a medium that can adjust their interaction patterns with each other, including their hearing friends. This tendency is to fulfill a variety of goals, including survival needs, which are also included in the form of Self Disclosure. Self disclosure is defined by the Deaf as not only about what is being thought, but has reached a small scope regarding feelings.

Social media is the medium - provider of the most information space compared to other media. As a media for receiving information, social media is the media capable of providing the most information for deaf people. In the past, before the emergence of social media, the information was received by limited media such as television, with a very small translator box, even some deaf people found it difficult to interpret the sign language, or newspapers with sufficiently difficult-to-understand language for some
deaf people. Therefore, new media with its convergence concept makes social media the most information provider media for deaf friends.

**Closed Captions and Sign Language Interpreters (BISINDO) as the Conditions of Full Access to Information and Interaction Space for the Deaf**

Both interaction and information spaces can be completely accepted by the deaf if they meet two (2) requirements; namely Closed Captions and Sign Language Interpreters (BISINDO). This has been proven through the results of the discussion based on the answers from the informants which revealed that all accesses - all the features required must fulfill these two (2) points so that they can fully accept and process the information as an interaction space: Closed captions as transcriptions of all matters relating to sound or voice produced in an information output in audio, visual, or audio-visual forms; as well as demonstration of sign language which is used as everyday language; the culture of Deaf friends - as the greatest understanding of the meaning in their life as persons with a Deaf identity.

**V. CONCLUSIONS**

Whether the content is accessible or not for the Deaf is actually based on the content uploaded. As long as there is text written in simple language and is presented with clear and attractive visuals, it will certainly be used as a medium or channel of communication for the Deaf. Then the completeness of access which refers to the deaf disability-friendly value is completely accessible when the text is added with a sign language interpreter demonstration. Deaf groups also use social media as a tool that can adjust their interaction patterns with each other, including to their hearing friends. This tendency aims to fulfill a variety of purposes, including survival needs.

With the existence of social media, connections between Deaf friends become available and open. By relying on its various visuals and forms, social media is easier to understand for deaf friends. The accessibility of Deaf friends is also unlimited, which is able to reach any space and time as well as long distances. Likewise with information sharing, in which Deaf friends become more easily obtain and share information so they can develop the ability to compete with others.

**REFERENCES**


