

Ethical Perspectives of Digital Divide: An African Case Study

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Abstract

Only social sciences-based techniques have been used in the numerous publications on the digital divide. A relatively small number of studies have also exclusively examined the digital gap from a philosophical and ethical perspective. An unequal, undemocratic, and unfair society are all products of the digital divide. In addition to raising significant discussion on digital justice, knowledge, power, democracy, globalisation, and information capitalism in Africa, this work raises ethical and moral issues and seeks to address them. This study's justification is that globalisation and information technology go hand in hand. This essay will also go into great detail about how all of these factors relate to information capitalism and how they influence Third World countries, particularly Africa. This research falls under the purview of digital culture and employs textual and critical analysis as philosophical approaches.

Keywords: Digital Divide, Africa, Third World countries, digital culture, Ethical Perspectives

Résumé

Seules des techniques basées sur les sciences sociales ont été utilisées dans les nombreuses publications sur la fracture numérique. Un nombre relativement restreint d'études ont également examiné exclusivement la fracture numérique d'un point de vue philosophique et éthique. Une société inégale, antidémocratique et injuste est le produit de la fracture numérique. En plus de susciter un débat important sur la justice numérique, la connaissance, le pouvoir, la démocratie, la mondialisation et le capitalisme informationnel en Afrique, ce travail soulève des questions éthiques et morales et cherche à les résoudre. La justification de cette étude est que la mondialisation et les technologies de l'information vont de pair. Cet essai examinera également en détail la manière dont tous ces facteurs sont liés au capitalisme informationnel et comment ils influencent les pays du tiers monde, en particulier l'Afrique. Cette recherche s'inscrit dans le cadre de la culture numérique et utilise l'analyse textuelle et critique comme approches philosophiques.

Mots-clés : Fracture numérique, Afrique, pays du tiers monde, culture numérique, perspectives éthiques.

1.0. Introduction

Information technology has brought significant changes to contemporary societies in Africa. It has not only changed African society but also generated ethical dilemmas. The nature of problems is unique (Moore 7). The situation has demanded that we conceptualise and critically understand this new development philosophically and ethically. Of all the issues, access to information technology is itself a primary issue of concern (Iniobong, 54). We may find a wide gap between information-haves and information-have-nots. This disparity in accessing information technology and the ability to use it has been commonly studied as a digital divide. The problem of the digital divide has many implications and extends to all fields of knowledge (Maurer and Lutz, 32). This problem has been approached by scholars in diverse fields. Most of the literature on the digital divide is empirical and descriptive in nature. Though the studies have ethical concerns as an undercurrent theme, they are not fully explored from an ethical point of view. The issue of the digital divide has to be understood from both a descriptive and a normative point of view.

Scholarly literature shows that there are few studies that investigate the digital divide, both philosophically and ethically. Philosophical contributions, moral reasoning, and ethical considerations are very less concerning in the issue of the digital divide (Iniobong, 5). However, in recent times, there have been attempts to understand the digital divide from an ethical and moral point of view. The digital divide brings up issues of access, literacy, usage, skills, exclusion, democracy, representation, class, race, and gender (Iniobong, 73). Technological design and information are also part of ethical considerations. The misrepresentation and myth of information, too, came under the purview of studies of the digital divide. The critical understanding of information society too comes under the purview of the digital divide. The scope of the digital divide is wide, as it is multi-layered and has multiple meanings. This work will touch upon various dimensions of the digital divide from an ethical point of view. In fact, ethics is a potential tool for understanding the digital divide and the nature of information society as a whole.

The digital divide, as a fundamental ethical issue, started being discussed in the domain of computer ethics (Veruggio and Operto, 80). There is a new wave emerging in the field of technology called democratisation of technology, which concerns all segments of people. Technology is viewed as a tool for the emancipation of people. Technology demands moral sensibility, as technology creates and operates within moral situations. The digital divide demands moral sensibility, as the digital divide not only creates within moral situations but also operates within moral situations (Dahlberg and Moss, 7). The issue of the digital divide has not only raised questions pertaining to ethics but has also emerged as an issue of justice. This work exclusively deals with the perspectives of the digital divide and evaluates them ethically. This is an attempt to develop an ethical theory of the digital divide by touching upon various dimensions of the issue. The ethical theory of the digital divide has been viewed from the perspectives of equality and freedom, social and individual representations, the rights and dignity of people, and justice and democracy.

2.0. Philosophical Approach of Digital Divide

Most of the studies on the digital divide are approached from the social sciences rather than philosophy. Since the digital divide is a complex and multifarious issue, there is a need to

understand the problem comprehensively. The discipline of philosophy may provide a framework for a comprehensive understanding of the problem. A philosophical approach may help in clarifying the nature and functions of the digital divide. First and foremost, philosophy can provide conceptual clarification and help us determine what exactly we are concerned about. Secondly, what is at stake in debates about the issue? Besides, it can help us determine what sort of questions we need to ask; for instance, is the digital divide a problem of justice or not? Is the digital divide a particular issue, or is it associated with other problems? And lastly, the philosophy might even provide us with answers to those questions. Otherwise, philosophy points us in the right direction for finding the answer.

Soraj Hongladarom observed that philosophy can help broaden our understanding of the digital divide, but the scholars have not investigated the subject from a philosophical perspective. He cites major works in the philosophy of information technology, such as Gordon Graham's *The Internet: A Philosophical Study* and Hubert Dreyfus's *The Internet*, and does not give any attention to the issue of the digital divide. He further considers that every single problem can be viewed through every branch of philosophy, and only the philosophers can guide better and more pragmatic solutions to all problems that arise in the course of any developmental process. Philosophers should always be open and try to find solutions and approaches that could help have a better understanding and give a good lead to the current issues of concern. The scholars felt that philosophy is a potentially very useful tool for understanding the nature of the digital divide. Philosophical resources such as metaphysics, epistemology, and social and political philosophy are highly relevant to understanding the moral significance of digital divides. Philosophical investigations are required to deal with the problem of the digital divide, and philosophical debates can be beneficial.

In addition, there are several approaches that help to analyse philosophically any issue or any dilemma. It is true that primarily philosophical analysis is an ongoing process. Philosophical analysis also expresses the process of investigation about any subject, and it is popularly understood through reason, analogy, putting forward arguments, critical examination of the argument, and rational progress through debate as well as argument. In this connection, philosophical analysis is helpful in stating the digital divide, analysing the nature of the digital divide, justifying a reason for the digital divide, and critically examining the digital divide. As the digital divide has emerged as a new phenomenon, it has to be properly conceptualized. According to Deleuze, philosophy is necessary, especially in situations where new phenomena already exist and where both undefined concepts and words are trying to find exact meanings. It is the philosopher's duty to clarify the unclear situation. The main task is to invite and define new concepts. Hongladarom too considers that to search for new sets of tools that are appropriate in analysing the situation or to find new ways of using the available tools in order to take into consideration the existing theoretical and conceptual philosophical tools used to better understand the issue such as the digital divide.

Information technology has transformed reality and knowledge in a new way, and this type of reality is viewed as virtual reality. Michael Heim, in *Metaphysics of Virtual Reality* (1993), observed that this new type of virtual reality indicates that computers and reality are interrelated and thus merits some kind of philosophical investigation. The debate on the digital divide may provide an occasion to consider how reality is influenced by it. The digital divide is an interconnected theme in both the technical and social realms. Indeed, this "new kind of reality, which can be considered in both social and technical terms, this is not to say that the digital divide has created a totally new world where everything is not the same anymore" (Hongladarom, 87).

The digital divide and its conceptual ramifications may facilitate new thinking to understand the changed reality in metaphysical terms (Hongladarom, 25). Apart from metaphysical concerns, information technology has implications in the domain of knowledge. In the context of information technology, knowledge is derived from the information processed through the network. There is a greater possibility that this kind of knowledge may not penetrate all the domains of African society. In this sense, the digital divide is also an epistemological issue. "If one subscribes to the view that knowledge derives its value (or justification) from being on a network, then the fact that the network is limited to only a portion of the population would seem to show that the value of that knowledge could well be improved, and thus the value is not a complete one" (Hongladarom, 87). Apart from metaphysics and epistemology, social and political philosophy is also equally concerned about the problem of the digital divide, as scholars in this field may approach the problem from the perspectives of equality, rights, democracy, and justice.

Stahl argues that digital divides are considered to be issues of justice. Stahl argues that philosophical debate can be beneficial when we are dealing with and debating the digital divide. Philosophical arguments could be considered. Moreover, Stahl argues that with regard to addressing the problem of digital divides, "we need to go beyond philosophical debate and enter the political space" (Stahl, 148). There are many fundamental ethical and moral issues involved and debated from an ethical perspective that have been considered. Issues such as access to information, literacy, exclusion, representation, nature of information, design of technology, and democratisation of technology have to be taken into consideration. The political understanding of the digital divide may provide space for thinking about transforming the unequal information society in light of the ethical evaluation of information technology and the digital divide. In this connection, computer ethics has evolved as a new field in the wake of information technology.

3.0. Emergence of Computer Ethics/ Information Ethics

Computer ethics has emerged as a specialised field to resolve the ethical dilemmas generated by information technology in existing African societies. There are many researchers who have suggested various labels for this respective field: "Computer ethics", "Cyberethics", "Information ethics", "Internet ethics" or "ICT ethics", and "Email ethics". However, most scholars use information ethics and computer ethics interchangeably. Prominent scholars like Norbert Wiener, Walter Maner, Deborah G. Johnson, James H. Moor, Donald Gotterbarn, Terrell Ward Bynum, Luciano Floridi, Herman T. Tavani, and Alison Adam have laid conceptual foundations for computer ethics as an academic discipline. The issue of the digital divide is also discussed as one of the important issues in the domain of computer ethics.

Norbert Wiener is considered to be the founder of computer ethics (Bynum, 54). In the mid-1960s, Donn Parker, a famous computer scientist, collected innumerable interesting case studies related to the unlawful and unethical use of computers by computer professionals. Parker said, "When people entered the computer centre, they left their ethics at the door". In the early 1970s, Joseph Weizenbaum, in his book *Computer Power and Human Reason*, which is regarded as the classic book in the legitimate field of computer ethics, defended that humans are much more than information processors (53). Walter Maner approached computer ethics from the traditional ethical theories of utilitarianism of Jeremy Bentham and J.S. Mill and the rationalist ethics of Immanuel Kant. Furthermore, Maner adopted the procedural approach as one kind of heuristic

method for computer ethics. Procedural ethics as a concept may be a related concept to John Pollock's procedural epistemology.

By the early 1980s onwards, several social and ethical consequences of information technology were becoming a public issue in the West with the rise of computer crimes and issues related to privacy and software ownership. This time, philosophers equally gave importance to computer ethics. According to James H. Moor, the development of computer ethics is sometimes overstated and sometimes understated. To overstate implies the production of a new ethical theory quite different from traditional ethical notions. To understate would imply the disappearance of computer ethics into ordinary ethics. Moor's contributions to computer ethics are insightful and inspiring to many. He provides not only well-designed curriculum materials but also a conceptual foundation in the field of computer ethics. Moreover, he begins to admit that "consequentialist theories and deontological theories are often presented as hopelessly incompatible" (Bynum, 200). He also argued for the possibility of a *unifying ethical theory* (emphasis added). Terrell Ward Bynum has broadened his approach to computer ethics by adopting a much more interdisciplinary approach. In his approach, he employs concepts, theories, and methodologies from applied ethics, the sociology of computing, technology assessment, computer law, and related fields. Deborah Johnson takes upon "applied philosophy" and comes up with it by using the classical ethical theories of utilitarianism and Kantianism (Jason, 42). She suggests that "ethical issues surrounding computers are a new species of old moral issues" (Jason, 64). Johnson thought that computers gave a new twist to the ethical questions that are already known, rather than creating wholly new moral problems. She has speculated that the field of computer ethics, at least as we currently understand it, may and perhaps should disappear in the future. She suggested that the issues in computer ethics might well become integrated into the issues of "ordinary ethics". However, she felt that the issues themselves would not disappear; rather, they would not be posed or framed as issues of computer ethics. There are discussions and debates about whether computer ethics is part of applied ethics, professional ethics, or global ethics. Some of the thinkers treated computer ethics as a branch of applied ethics. Some scholars focused exclusively on professional ethics. More than this, some scholars appealed for global ethics due to the global character of information society or information technology. Some scholars extended the traditional ethical theories in resolving the moral dilemmas raised by information technology. But often, one finds difficulty arguing with the traditional ethical theories because of the specific nature and context of information technology.

Computer ethics got its prominence as a part of professional ethics through some of the writings. Writers like Deborah Johnson and Donald Gotterbarn treat computer ethics as simply a form of professional ethics. The codes of ethics and professional responsibility are the key issues of this approach. Donald Gotterbarn adopts "professional philosophy" and approaches computer ethics from a *professional ethics* perspective. First and foremost, he concerns himself with standards of good practice and codes for computing professionals (cf. Bynum and Rogerson, 32). The term professional broadly includes designers of computers, programmers, system analysts, and operators. He argues that ICT professionals have specific duties and responsibilities in light of their special knowledge and powerful impacts on the world. For this, professionals must have qualities such as moral integrity, trustworthiness, honesty, self-respect, etc. In a situation where, professional interests and business interests are conflicting, it is suggested that he take a side of professional interests, keeping in view the interests of a larger African society. However, every professional (e.g., engineers, doctors, lawyers, web developers, and designers) should take a

decision and say, “*As a professional, I cannot ethically put business concerns ahead of professional ethics*” (Hansen and Zenobia, 66). As information is context-dependent, so is information technology application-dependent.

4.0. Digital Divide and Ethical Theory

The digital divide is not only confined to information technology but also extends to African society. The digital divide is considered an important issue in computer ethics. The ethical theories developed by computer and information ethics are mostly confined to the issue of access to ICT. But it has to understand from a larger perspective, in which it can internalise the various dimensions of the digital divide. The digital divide creates an unequal, undemocratic, and unjust African society. In order to create an egalitarian and democratic African society, it is a prerequisite for bridging the digital divide. Ethical and moral concerns may provide necessary insights into understanding this situation and minimising the digital divide. Hacker and Mason observed three main areas of ethical neglect in research and analysis concerning the digital divide:

1. “There is a set of strong methodological ethical problems, as in the cases of organisations that release data summaries without providing details about their methodology... (though) insufficiently grounded in valid data” (106).
2. “There is an ethical issue in arguing that the digital divide results from the fact that those who are less connected to ICT than others are simply less motivated and that those who lag behind in obtaining and using network technologies are more “want nots” than have nots. This type of ridicule neglects the fact that people vary in experiences, skills, and motivation to use computer-mediated communication (CMC)” (Hacker and Mason, 106).
3. “It may be unethical to argue that certain groups lag behind other groups in ways that reinforce stereotypes of those lagging groups. This can occur by trying to help these groups while unknowingly contributing to the reinforcement of ethnic stereotypes” (Hacker and Mason, 206).

Ethics refers to what is good for individuals and society; these are ethical principles. Ethicists believe that ethical considerations are necessary for all social and philosophical research. Ethical principles are the tools that consider whether an act is morally right or wrong. Ethicists debate often in terms of rights, deontological theories, and justice. The concepts of justice and rights are closely linked to ethics. The question of ethics prevails everywhere and whenever dilemmas arise, especially when the process of setting something right and wrong goes on. In the backdrop of information technology, computer and information ethics emerged as areas of applied ethics. The investigation of the digital divide is directly related to the broader field of computational ethics (Hongladarom, 43).

It is argued that traditional ethical theories would be well applied to the problem of the digital divide. It is important for us to understand the genesis of applied ethics, as this subject holds significant importance to the contemporary issue of the digital divide. It is well known that traditionally, philosophers have been provided numerous ethical theories such as utilitarianism, hedonism, egalitarianism, virtue ethics, deontological ethics, ethics of care, and so forth. But scholars argued for a new framework of ethical theories for understanding the digital divide, as the issue is new. Wallace Koehler suggests that the digital divide can be described in the context of three fundamental information ethics concerns: “the right of access”, “literacy, and “information literacy” (7). The ethical theory of the digital divide has to be evolved by touching upon the dimensions of access and exclusion of social groups to information technology; representation and misrepresentation of information; nature and social function of information society; social,

cultural, economic, and political implication of the digital divide; and ideological understanding of information technology-mediated society.

5.0. Ethics of Access to Information Technology

The issue of the digital divide is primarily identified with access to information technology. Scholars considered access to information and digital technology an ethical issue in the information society as it generates inequalities in the world. Most of the research on the digital divide has been focused on access to computers and information technology, which affects even developed nations, developing nations, and underdeveloped nations. Unequal access to technology is affecting society significantly. Access primarily meant physical access, which means having a personal computer and Internet access (van Dijk, 11). Jan van Dijk further broadens this by arguing that the concept of access can be divided and explained specifically into four categories: motivational access, material/physical access, skills access, and usage access (Dijk, 11). “Motivational access signifies motivation to use information and communication technologies. Material access refers to the possession of computers and network connections. Skill access means the possession of digital skills. And usage access denotes meaningful usage of digital technology” (Dijk, 15). McIver, too, viewed access to information as having to be studied at the level of the properties and characteristics of access and the means and availability of access. McIver further explains that the means and availability of access are not dependent only on the economic status of individuals or their communities but also on information usage skills and geography. Access to the equipment, software, and telecommunication services necessary for Internet access must obviously be accompanied by the skills to make use of them.

Access to information is not only characterised by access technologies. However, access to information technology in other ways means access to information. Access to information technology can be viewed as digital or informational access. It is true that access to technology enables one to obtain information from the Internet. The issue is that one group is “information haves/information rich” and the other group is “information havenots/information poor” (Adomi, 53). The former sees access as a non-issue, and for the latter, access is a real issue, particularly for certain socio-demographic groups.

Philip Brey discusses equity and access. Brey argues that in the field of computer ethics, it is studied how both “the design of information technologies and their embedding in society could increase inequalities, and how ethical policies may be developed that result in a fairer and more just distribution of their benefits and disadvantages. This research includes ethical analyses of the accessibility of computer systems and services for various social groups, studies of social biases in software and system design, normative studies of education in the use of computers, and ethical studies of the digital gap between industrialised and developing nations” (409).

Some of the scholars extended the debate about the digital divide by studying the existing problems in African society. Jerding evaluated some of the views in this regard. For Richards, divide is not a new issue, as it persisted all along human existence, and wealth remains the important criterion for all sorts of divide. He further suggests that a substantial role has to be played by the government to gain access by all its citizens rather than private concerns (43). Jorge Schement mentions people who don’t have access as faceless to the wealthy and middle classes who have access, and they should remember, imagine, and be concerned about those faceless people, which will bring change and benefit for everyone (32). Adam Clayton Powell III, by evaluating the studies on the digital divide, concluded that the digital divide is “largely a myth”. He cites those who have access and mentions that the gap mentioned by all is either reduced or has

disappeared at all. But he agreed upon the point that education remains a barrier to the utilisation of technological advancements. According to Joel Spring, mere supply or providing access cannot change things or bring equality; instead, quality has to be maintained while providing access, only through which equality could be achieved. However, the existing inequalities in various forms further add to the issue of the digital divide (43).

Access to information technology is not only intrinsically good but also associated with power. Computers and information technology can give power to those who already have it and to those who had little power in the past. If access goes primarily to those who already have power, or if they get access first, then the interests of the already powerful are more likely to be served. The concern about access leads to social goods. Johnson further says that information technology and the Internet are tools or powerful resources. These tools assist individuals and organisations in acquiring goods and achieving goals. To put it simply, people can convert Internet access into other valued services, goods, and life outcomes (DiMaggio et al., 54). In this age of information technology, people are segregated from access to information, and communication technology is also excluded from many other social goods (McDonald and Denning, 86). This clearly indicates that access to information technology is a social good. To put it simply, access to information technology has the potential to achieve the status of a primary good. But the one is not having access, which obviously leads to disadvantaged many “core goods” or “core values,” as said by James Moor. The core goods, such as knowledge, ability, freedom, and, to name a few, Jeremy Moss, argue that not having access, which is “instrumentally vital for access to other goods” such as knowledge about health outcomes, employment, or access to democratic institutions (Moss, 165), is essentially a larger “threat to one’s well-being”.

A lack of access is seen as a root cause of the digital divide. Without access, people are disenfranchised into three domains: access to knowledge, which is lessened or prevented by a divide, where people in affluent nations' countries could benefit from these gadgets; the same is not applicable to underdeveloped countries' people, who are falling further behind. The second concern is the barriers to participation in democratic or decision-making processes in a country. Thirdly, not having access to digital resources might severely hinder the prospects that people in underdeveloped countries have for economic growth (Moss, 162). Hacker and Mason hold that in understanding the digital divide issue from a larger perspective, we have to recognise three other concerns related to it other than viewing the digital divide as simply having access to information technology. The digital divide not only excludes people but also has implications for the functioning of democracy. They argued that “both politics and ethics are not visible in most statistical reports concerning the digital divide” (Hacker and Mason, 101). They probed the digital divide by asking, “The first is what will happen to the digitally excluded people. Second, there is the question of what dysfunctional system effects may result from non-inclusive emergent systems. The most challenging issue is how a democratic political system can maintain non-democratic communication systems” (Hacker and Mason, 101). In that sense, the digital divide is an issue invariably related to democracy. The prerequisites for democracy are equality and freedom. Uneven access to any resources is always a problem for democracy. The availability of certain resources is necessary for the well-being of the world, so one can access them. If certain things are not available, no one can access them. In this context, the power of digital and technology should be available all over the world for their success in bringing about the well-being of the world. In the age of information, it is “morally imperative that equal access to information via computer systems be afforded to people” (Grodzinsky, 221).

The digital divide has been debated from two perspectives: a cynical negative argument and a comprehensive argument. According to the cynical negative argument, there is nothing special about access to computers and information technology. How things are distributed and the distribution of computers and information technology are like everything else. Those who are already powerful and have wealth are always the first to get access. But the poor always get new resources at last. Thereby, there is nothing new or unique about computers and information technology. Deborah Johnson's counterargument is that it says nothing about how resources *ought* to be distributed. Further, this doesn't recognise the distinction between descriptive and normative claims. In addressing ethical issues, we are concerned with how access should be distributed, not just with how it is being distributed. She put forward her argument against negative arguments in the context of information technology. She prefers broad access to all new technologies on normative grounds, and a special case has to be made for broad, even universal, access to computers and information technology. She is in favour of a comprehensive argument that holds that "*computers and information technology seem to be special because of their comprehensive usefulness*" (223). Information technology affects many aspects of life and is used in many contexts to achieve different ends. So, the comprehensiveness of its use provides an argument for broad distribution. As Johnson says:

Computer and information technology is transforming so many domains of life that its distribution will affect the distribution of opportunity and power in the future. Hence, unlike any other technology, broad or even universal access to computer and information technology and the Internet is an essential for democracy (219).

Deborah Johnson highlights access to the Internet is important for democracy. Dream of any type of democracy is to bring political equality. Hence, Johnson put forth in this manner:

Democratic societies are committed to the idea that every citizen is equal with respect to the state and the law; that is, democratic societies are committed to *political equality*. However, political equality cannot be entirely separated from social and economic equality. That is, social and economic *inequality* can lead to political *inequality*. Hence, democratic societies have to be concerned about social and economic inequality (220).

Johnson further maintains that political equality and socio-economic equality are mutual and vice versa, and by the way, the inequality of both is too. But unequal access to resources leads to inequality. In this connection, unequal access to information technology "*poses a serious threat to democracy*" (Johnson, 218). Unequal access to any developmental factors creates a serious impact on not only socio-economic patterns but also socio-economic patterns. Limited or unequal access to powerful resources such as computers and information technology not only brings in socio-economic disparity but, along with it, brings a threat to democracy and its pattern of maintaining equality.

The digital divide has been debated not only from the standpoint of democracy, but also from the standpoint of human rights. There are some scholars who consider the digital divide an issue of civil rights. "The digital divide is the most pressing civil rights issue of the new millennium." In the same vein, Molinari argues that the Internet should not be just a thing confined to a certain section of the population. It is a social necessity in this digital era, and it should be right for every citizen.

The issue of access was looked at from the perspectives of human and civil rights and distributive justice. According to Kant, right means “the power to create obligations”. He further stated that what is right to one person becomes a duty to another (Umotong, *Ethnic Politics in Nation Building: The African Perspective*, 45). Only rational beings can have rights. Non-rational beings have neither rights nor duties. Only man, thus, has both rights and duties. Kant’s notion of justice is centred on a very basic idea: human beings, defined by reasons, should be treated as ends, never as means. It is a way of giving rational beings their due but not treating them as means. Kant has been discussed about his political framework, which is not separated from his moral concerns. Some philosophers have attempted to characterise rights in terms of normative categories like duties. According to them, a right is just a duty seen from another perspective. As rights are correlated with duties, Similarly, if Internet access is an issue of human rights for underprivileged people, it is the duty of the government to provide access, training, equipment, and infrastructure. The right to a fair trial is a human right and is equally applicable to the people of the North or South, East or West. In connection with the Internet, access is considered a human right and equally applicable to everyone living in this world. In other words, it is extended to developed, developing, and underdeveloped countries. To understand the issue of the digital divide from an ethical perspective, we have to deal with it in relation to equality, social good, democracy, human rights, and justice. Further, it has to be viewed from the perspective of inclusive and equitable development.

6.0. Digital Justice

Apart from rights, justice has always been a key issue in the philosophical discourse, chiefly in the realm of social and political philosophy. Justice plays a pivotal role in the social, economic, and political spheres. Scholars have tried to explain justice in terms of equality, virtue, fairness, and so forth. The literature indicates that there are various types of justice: social justice, economic justice, legal justice, political justice, and moral justice. In addition, digital justice is a comparatively modern phrase and connotes just and fair treatment for the people constituting a society. Digital justice has emerged as one of the most important concepts since the advent of digital technology. The notion of digital justice should be applicable to all sections of society. Throughout the world, many people struggle for justice, and digital justice adds to the burden. Consequently, the digital divide demands digital justice. Digital justice concerns all social groups, regardless of caste, religion, region, gender, and language. Digital justice has to pay attention to deprived people. The Institute on Race and Poverty defines digital justice as “regardless of race, ethnicity, income level, or educational background, all people will have adequate access to computers and the Internet, as well as adequate opportunity to learn the skills needed to use the technology. Digital justice means that people have the right to access the Internet regardless of whether they live in a city, suburb, or rural area, and that pricing should not be punitive if they live in a sparsely populated area” (Donoghue, 996).

When we are taking and considering the digital divide as a problem of digital justice, which means undoubtedly access to information technology is merely a primary good, Taking and using technology as a tool and social force on a mass scale Access to information has frequently been perceived and observed as a “two-edged sword” and “threat to the existing social order.” Access to information refers to “access to power”. This is the reason why digital justice is considered. The idea of the digital divide is considered to be digital integration and digital fairness, which is the

fair distribution of digital technologies. Digital justice has a moral as opposed to a commercial or technological purpose. However, social segregation or apartheid and Internet segregation or apartheid are morally unacceptable (Johnson, 43). The digital justice system concerns access to computers and the internet, broadband network access, software, training, and usage. The digital divide has to meet digital justice.

In addition, digital justice has been extended into the significant concept of distributive justice. In a digitalized world, most things seem to be digital, so in this context, most things represent themselves in a digital way, which is why distributive justice has taken into consideration the digital divide. Unequal distribution of digital resources and unequal access to opportunities are causes of inequality, which is a form of injustice. Herman Tavani (2013) raises a valuable question: how to apply distributive justice in the context of information and cybertechnology? Without a doubt, this question truly applies to the digital divide. How do we apply distributive justice in the context of the digital divide? As Jeroen van den Hoven and Emma Rooksby (2008) point out, distributive justice concerns "the distribution of information, information services, and information infrastructures" (Tavani, 307). Moreover, it would be helpful to introduce some of the notions of social justice that have been provided by John Rawls. It is well known that Rawlsian theory talks about the "veil of ignorance". Rawls's concept of justice is considered "fairness". People at the backward end of the "veil of ignorance" will really need access to information. The principle of Rawls, "each person is to have an equal right to the most extensive basic liberty compatible with a similar liberty for others", applies to the existence of the digital divide. The most important claim of distributive justice is that all citizens must be treated equally with respect for any nation, region, race, gender, and ethnicity according to the same norms.

People must have access to information in order to make informed decisions and achieve a democratic African society. To do that effectively, we need to understand the consequences of social policies. Van Dijk brings John Rawls's principles of social justice and argues that information is the primary good. If this is the thing, then primary goods are material and immaterial goods that are so essential for the survival and self-respect of individuals that they cannot be exchanged for other goods, such as a basic (survival) level of income, life chances, freedoms, and fundamental rights. Access to information is a basic welfare right in order to make decision-making easier. In order to ensure digital fairness, digital justice emerged as a global normative tool that may be well applied to those who are needy and deprived in the digital society. From a normative point of view, it is fully based on the two core values of concern and fairness towards others. In fact, social justice operates on various moral grounds, and human beings share the basic amenities as well as the same concern for others.

According to the theory of justice, the notion of justice is popularly understood as meaning that people should be advantaged fairly or deservedly. In other words, individuals should not be deprived unfairly or undeservedly. Thus, African society should promote the fair distribution of "primary goods" (Grodzinsky, 75). Access to information technology allows people to attain the primary goods and carry out life's plan. John Rawls's classic principles of social justice can be well applied to access to information technology, its use and skills, and the overall information society. Therefore, every citizen has a right to not face any discrimination based on price or other unfair or unjust barriers to accessing and using technology.

7.0. The Ethics of Digital Exclusion

The contemporary literature on information technology reveals phrases such as "digital exclusion," "eInclusion," and "digital inclusion" (Al-Muwil, 638). These phrases came up for

debate in the context of ethical problems and dilemmas generated by information technology and pressing for the inclusion of the marginalised by explaining the process of exclusion in the digital domain.

Exclusion has different faces that can be discussed in the social, economic, and political domains. Exclusion is considered a special concern of justice. Digital exclusion is basically associated with the issues of accessibility, use, and skills. The analysis of digital inclusion and the digital divide is closely associated with access and use inequalities in social, economic, political, cultural, geographic, gender, demographic, and ethnic aspects as a central understanding or explanation of the issue. There is a correlation between the digital divide and exclusion. It is a true fact that exclusion operates at various levels, such as individual, socio-economic, institutional, organisational, and political. Social exclusion can be explained in various ways. First and foremost, it is a “multidimensional phenomenon” (Maldonado et al., 137). Social exclusion involves a process by which “someone becomes detached from African society and from its moral order” (Pleace, 1998: 48). In other words, “rupturing of the social bond” (Silver, 4411), and it is the concern of ethical or moral “about being “in” or “out” of a circle.” (Burchardt et al., 228) Social exclusion exists in developing nations, like Africa, where deep, perverse, severe poverty is one of the major determinants, especially when the digital divide comes into the picture, which is likely to “exacerbate social exclusion”. The new notion of digital exclusion has been used interchangeably with the phrase digital divide. Some studies have looked beyond the digital divide.

When we are considering the multifarious concept of digital inclusion, we need to take a critical look in the context of access, social exclusion, knowledge, literacy, skills, opportunity, and public policies. Digital inclusion is also influenced by interests, actors, and value systems. Without a doubt, digital inclusion is connected to social inclusion. The concepts of social inclusion and digital inclusion that are currently involved in the development of information and communication technology. The latter would be focused on unequal access to information and communication technology, whereas the first would be more comprehensive about the broad use of information and communication technology in all aspects of social life. The liberal approach denotes individual competition for economic resources as the main engine of social relations. Some other approaches consider societies as permanent struggles between actors. There have been concerns voiced about the exclusion and inequality. Digital exclusion exists in African society on the basis of poverty, education, race, and gender. It is argued that digital exclusion is a mere reflection of social inequalities” (Imran, 58). There is always discrimination and unequal access to any resource, and it is also prominent in the field of information technology. Those who do have the power enjoy it, and those who do not have it suffer. This is applicable to information technology too.

Exclusion and inequality are major concerns about the issue of the digital divide, which will also cause and force new disparities within and between nations. Exclusion and inequality have always been present throughout human civilization and still exist in African society. The issue of exclusion is often debated in the digital divide. Exclusion and inequality are mutually contributing. The digital divide represents and reinforces social exclusion. In fact, exclusion is a very significant ethical issue and is closely linked to democracy. Exclusion has come into a new form that is called “digital exclusion”. The unequal access to ICTs adds a new dimension to the social exclusion debate. Equality refers to comparing one individual to another in a comparative manner, such as in terms of wealth, education, income, and so forth. The digital divide perceives the problem of inequalities such as socio-economic and political inequalities.

Robels et al.'s approaches to digital inequalities are the third dimension of the digital divide. This social divide leads to a technological divide, and this technological divide promotes the social

divide more and more (75). The hierarchy of dominations and subordinates, superiority and inferiority that exists within a given social system is called the social stratification. Pitirim Sorokin described social stratification as “the differentiation of a given population into hierarchically superimposed social classes” (Sorokin, 11). This denotes the power dimensions of the social systems that have taken up hegemony over each other through the means of power. Earlier in 1946, sociologists Max Weber came up with the concepts of social stratification, where he mentions three different kinds of stratifications: the status, which denotes social power; the class, which denotes political power; and the party, which includes political power. Information technology, too, brings social stratification.

Fulk et al. (1996) provide an argument about computer-mediated communication, and public goods theory tries to explain and attempt to bring more ethics into the respective digital divide research discussions. When the exclusion occurs in any domain, it is fair to bring up ethical and moral discussions. Public goods theory can be described as “how collective action can be induced among self-interested individuals, groups, and organisations” (Hacker and Mason, 110). It is fitting here to mention the example of public parks, which is the best classic example of inclusion (Hacker and Mason, 111). It would also be desirable to provide different aspects of public goods so that everyone can be included; in other words, no one is excluded. Hence, public goods theory can help us understand the issue in a better way.

Warschauer specifically covers the convergence point of information and communication technologies and social inclusion. The fair share of resources does not sum up the definition of social inclusion, but most importantly, it is also of “participation in the determination of both individual and collective life chances” (cf. Warschauer, 8). Warschauer argues that *technology facilitates social inclusion* (Warschauer, 20). Social inclusion means “the extent that individuals, families, and communities are able to fully participate in society and control their own destinies, taking into account a variety of factors related to economic resources, employment, health, education, housing, recreation, culture, and civic engagement” (Warschauer, 8). He views it beyond the notion of bridging the gap; it is fair to achieve social inclusion for all. Social inclusion is always a matter of an adequate share of vital resources.

In communication research, there is a concentration on both old media and new media, which have a serious impact on people’s acquisition of knowledge. *The knowledge gap theory* would really benefit understanding the unequal distribution of knowledge (Wei and Hindman, 2011, emphasis added). The gaining of knowledge is a critical form of social inclusion that is closely related to the usage of different media. The major concern with digital inclusion is that ICTs should be part of the solutions to the digital gap that facilitate the flows of knowledge and information to attain new territories. Mansell and Wehn argue that “in the emerging ‘knowledge societies’, access to communication is becoming the key tool for social inclusion” (p. 83). Therefore, digital inclusion is essential to reaching the masses with basic needs. In arguing for the ethics of digital inclusion, we have to identify the marginalisation and exclusion of certain social groups. Along with the issue of inclusion, we have to take into consideration the knowledge gap and democratisation of technology.

8.0. Class, Gender, Race and African Society as Markers of Exclusion

The digital divide means the advancement of technology that promotes and causes discrimination in the digital sphere. The existing social discrimination creates disparities or a gap in the utilisation of information technology. Information technology has become a primary tool for many things that generate inequality and cause injustice for certain segments of people who do not

have access to it. Information technology can be the tool that empowers different segments of people with information and skills for social, economic, and political participation. Class, gender, race, and caste are some of the crucial factors of the social divide as well as the digital divide (Iniobong & Udofia, 74). Moreover, as mentioned above, these social factors are always a matter of equity and concern, both ethical and moral. Allowing the race, gender, and caste-related digital divide to continue is an ethical offence. It is immoral if these categories of people in democratic countries who cannot fully exercise their rights, such as access to information and freedom of expression, are limited. The existing social divide causes the disparities to acquire more benefits than the lower ones, which can be debated and argued on moral grounds. An undeniable factor is that social gaps exist in society. This social gap would be the cause of the digital divide, and the social gap generates a new one. This is considered unethical, unfair, and an injustice. As Johnson pointed out, whenever we are debating and analysing the issue of the digital divide, it is fair to consider and discuss the issues of race, gender, and disabilities. The disparity in the field of information technology is visible in developed and underdeveloped nations. Class is the most common factor in the digital divide.

Apart from class, the gender digital divide is commonly understood as the disparity between men and women. The existing gender gap creates a divide in the sphere of ICT. Many studies showed that women are mostly underrepresented and disenfranchised, and their participation is very low compared to men in the fields of science, technology, engineering, and medicine. And science and technology are still a well-younger-male-dominated field. Gender bias is a true fact in the field of information technology. Women are still deprived of ICT access and have very little participation in the ICT sector. Women are not just simply excluded from access to information technology; they are deprived of the future's economy. An undeniable factor is that social gaps exist in African society. This social gap would be the cause of the digital divide, and the social gap generates a new one.

When we are considering the issue of gender and information technology, or computers, we also need to address ethical issues. The gender gap is one of the crucial issues when the digital divide is brought into the picture, which dominates discourse about women's and minority use of the Internet. It is observed that most ethnic minorities and women are underrepresented; women have been discriminated against in various ways in the field of information technology. The exclusion of women in high-tech industries and the misrepresentation of women in information technology positions are serious ethical concerns. Even when women are working in the information technology sector, their work is low, and their representation is not there.

According to Mphidi, access to the Internet is limited to women more than men when compared; the reason could be associating men and information technology with technical skill sets, thus presuming women may not prefer or avoid it for such reasons (64). Gender inequality is one of the pressing issues in the digital sphere, and the existence of gender equity in computing articulates the issue of computer anxiety. Gorski describes "gender inequities in African society and other media are replicated online". A study has indicated that the frequency of women users visiting the web of online sites is less than that of men users, where once they visit, they would be again in the categories that spend less time too. The argument placed is that due to the prevailing gender socialisation in African society, women tend to have no interest in mechanical-oriented operations, which are supposed to fall under men's purview. It is observed that a sufficient contextual understanding of gender roles has to be worked out to widen the perception of internet usage among the gender category (Kennedy, 73).

The engineering of hardware and software is mostly negotiated with men, with a very low proportion of women in the contract, where women enjoy more of the role as consumers of Internet-related programmes and other utility items. The digital divide, which is gendered, can be traced to the accessibility of technologies or exposure to them since the early ages of socialization. The male population, from a very young age, is considered more inclined towards technological innovations than their female counterparts, where this is reinforced through gender socialization. This would further have an impact on the later lives of females in higher education or the professional phase of having a negative attitude towards the choice of usage of technological advancements. Computer-related vocational programmes are less attended by females than males. Hence, the secondary stage of socialisation at school also reflects a reinforcement tendency by motivating males to go in line with the digitalized training. Which extends the choice of the individuals in pursuing higher education at different levels, giving a trend of males being tuned to opt for engineering and computer sciences on the one hand and females being tuned to opt for more humanities, social sciences, and nursing courses on the other.

In cyberspace, women are not only misrepresented but also sexually targeted. The way women are represented in cyberspace is a serious issue. Pornography enables lower ethical and moral values towards theirs. It is exploitation of women and degrades women. The Internet promotes not only global trafficking but also sexual exploitation of women and children. Pornography has more visibility and easy accessibility through the medium of the Internet than any other medium. The way it is reaching the public and entering the private space through computer networking is remarkable. Pornography through the Internet is easily accessible, affordable, and anonymous. Even its distribution becomes global. Feminists have argued and criticised that pornography subjugates as it degrades women. It leads directly to violence against women. Pornography is breaking cultural, social, and human values. Pornography is the production and consumption of inequality. Feminists have criticised pornography not only because it produces inequality but also on the grounds that it is the eroticization of inequality. The industry of pornography is growing due to its quasi-universality, which results in preferences over certain sets and turns the individual who enjoys the quasi-universal industry into stalkers. Predators prying and collecting information about women is keeping increasing, which could either make women shy or drive them away from the Internet.

In a male-dominated African society, most of the advantages of technology are acquired by men rather than women. According to Peter Drucker, technology is a potential tool that would be the "great equaliser," and technology can be used on an equal basis by segments of women and men (33). There is still significant gender inequality in the access to and use of ICTs, and a great deal of creative policy-making is needed in order to ensure that women may also share the benefits of ICT deployment in their societies. Women really need education and training for real access to information and knowledge and to gain technical skills. It is important to recognise that gender has to be situated within a broader context of human rights. It is observed that "rights to, rights within, and rights through" exist in all walks of life. Women's active involvement is essential to ensuring that a plurality and diversity of views are accepted in the information society. This engagement is another step towards promoting gender equity in the information society.

The category of race also has a role in the field of information technology. All over the world, different races are there. But when we are talking or hearing the term racism in regards to the digital divide, the first thing that automatically comes to mind is that there are white and non-white people. With regards to these two racial groups, there are many studies available from western countries. According to those studies, there is a difference in Internet usage between these

segments. The study by Lu, Ming-te, titled "Digital divide in developing countries," expresses how race and income have a serious effect on the usage of computers and new technology (54). Some studies reveal that racial differences exist even in terms of Internet access and use between whites and African Americans in the household and workplace. The fact is that the United States of America is an economically affluent nation in terms of Internet access, infrastructure, and technological development. The digital divide exists in their own country, but they talk about the digital divide for Third World nations; it is merely like "blinds leading the blind" (Singh, 36). This is obviously an equity and access concern that is related to the digital divide and can be analysed with respect to race. Some studies have portrayed how blogs and content enhance hate speech. Koehler argues that the racial wealth gap has caused the digital divide to grow; otherwise, the racial divide will continue to widen (54). In one sense, the demands of traditional and new civil rights groups have included education, jobs, and housing. But this is not sufficient to bring new technology to black families and educational institutions.

The relationship between cyberspace and racism is entirely new. Since everyone knows the Internet is a basic tool for communication, the shocking thing is that ideas of racism spread on the Internet in various forms: electronic mail, websites, online, and Internet relay chatter. Thiesmeyer expounds that the rhetoric of hate is conducted through the internet, or, in other words, the 'rhetorical role' in the internet is operated with the aspect of race in it. She points out how the rhetoric of racism is extended internationally in the up-coming of neo-Nazi propaganda, apart from racial and minority groups in the United States, like African Americans and Hispanics (Umotong, *Humanism and Terrorism: An Epistemic Overview*, 66). Two forms of racist speech appear in the internet space: hate speech comprising text, music, images, and online radio broadcasts that urge users to move against the targeted group; and persuasive rhetoric, which dismisses the direct attack but facilitates promotion and justifies violence.

Tavani delineates other ways in which blogs and blogospheres directly or otherwise contribute to racial prejudices online. The blogs would be content with free speech and racial stereotypes as well, which would generate racial prejudices. The cyberspace has been used in duality while the racist propagation is considered. It acts as a space to explore the issues surrounding racism through discussions and confrontations, and it also acts as a space to facilitate aspects of racism to a negative degree. The internet, which has a greater communication purpose, is channelled towards miscommunication by using it as a tool to target certain groups of people or communities (Iniobong, *Ethnic Politics in Nation Building*, 13). As a result, the proliferation of racist materials is the cause of rising hate speech. The Internet can and has been used to magnify the rhetoric and significance of hate groups. In addition, race and colour are two of the pressing issues that are often connected with the digital divide. It is interesting to note that if we search the image of a hand on the Internet, there will appear the hands of white. It is inevitable here to raise the ethical question: do blacks have hands or not? And their hands, why cannot they get space on the Internet? This clearly shows how social hegemony is acting even in the field of information and communication technology.

Like race in the West, caste plays a similar role in the technological field in Africa. The caste system is a hierarchical social order in which caste operates in all spheres of life: social, economic, political, and cultural. Dalits are the victims of this social order. The everyday discrimination and exploitation of some caste tribes carried to even the ICT-mediated sphere. In the age of information, the caste system reflected itself in the digital sphere too. Dalits were not only marginalised in information technology in terms of access and opportunities but also humiliated in cyberspace. There is a correlation between information technology and caste.

In general, the digital divide is understood as one kind of stratification or the divide that sounds in terms of class or in terms of urban and rural. But the digital divide is something that is more antithetical. It should be understood as a measure of social power. Apart from the generalised thinking on the digital divide, it must be revised in terms of the perspective of social power available (Singh and Chobotaru, 43). Dalits are victims of and vulnerable to this digital divide. Unequal distribution of digital resources and unequal access to opportunities are causes of inequality, which is a form of injustice. Information technology has not only excluded Dalit but also established the elite cultural hegemony. The power of information in contemporary times is equated with the Sanskrit language. Sanskrit is used as a source of knowledge and social power by the traditional social elite at the cost of negating the knowledge systems of lower social strata. Dalit scholar considers: "IT is turning into another Sanskrit. Sanskrit predestined Dalits' exclusion from knowledge. These barred Dalits from intervening in the thought process practiced by traditional society... The road to the IT revolution goes via English and computers. This deadly combination has created a social context where the Dalit absence is predestined" (Singh and Chobotaru, 64). Access to information technology is also one of the causes of the further marginalisation of Dalits from the mainstream. The demand for the inclusion of Dalits in the digital sphere should be seen as the justice of the social, economic, political, and cultural spectrum, as well as the fact that Dalits can raise their voice against the elites through the cyber media (Thirumal and Tartakov, 64).

9.0. Conclusion

Information technology has brought many changes to the world and revolutionised human life. The digital divide has emerged as a problem of information technology. On the one hand, developed nations and the privileged and elite took advantage of information technology, while on the other side, unprivileged social groups were marginalised and excluded. The lower-income groups—women, blacks, minorities, and Dalits—were marginalised in terms of class, gender, race, and caste in access and underrepresented in the information technology industries. Moreover, they were unrepresented or misrepresented in cyberspace. In other words, information technology has facilitated the dominant hegemony at the cost of negating or subordinating the other. The issue of the digital divide has to be understood in terms of hegemony too. To strengthen democracy, plurality has to be allowed in cyberspace, and multicultural traditions have to be celebrated. Human dignity, freedom, and justice are important values in addressing the digital divide.

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Short Bio

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