



Understanding the Digital Divide in the Contemporary Digital World

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- Vol. VII, No. IV (Fall 2022)
- Pages: 7 – 14
- p- ISSN: 2521-2982
- e-ISSN: 2707-4587

Key Words: Social Digital Divide, Gender Digital Divide, Universal Digital Divide, Contemporary Digital World

Abstract: This article explores the concept of the digital divide and its different forms, which persist despite the rapid transformation towards digitalization. The divide refers to unequal access and use of technology, the internet, and hardware and software, based on social inclusion/exclusion, gender, and universal accessibility. The causes of the divide include lack of education, access, affordability, motivation, and knowledge of technology. The divide adversely affects the economy, education, and social sphere, leading to compromised economic growth. The article highlights that the COVID-19 pandemic has further amplified the severity of the digital divide. Therefore, governments, commercial and non-commercial sectors need to collaborate to bridge the divide and achieve universal digital access.

Introduction

Undeniably, there have been progressions and developments in the field of information technology and this evolution of the industry has influenced almost all of the vital segments of societies across the world in developed and as well as developing countries including the segments of the health sector, transportation, communication education and business. This development in ICT (Information and Communication Technologies) is giving rise to the adaptation of the pictures, processes, text, sound and procedures into the form of digital material that can be processed with the help of IT. In the contemporary era, digitalization is gaining enormous attention and is becoming a topic which is casually conferred and the technologies that are associated with this concept are having a stimulating impact on commercial and personal lives simultaneously. ICT is among the characteristics of digitalization and it helps in the achievement of a number of objectives including access of information, minimization of

the cost of business and superior connectivity for the people etc. (Aissaoui, 2021). Although, the occurrence of digitalization is not entirely equal around the globe because of there is an imbalance of access to devices and technologies and such imbalance is referred to as the digital inequality or digital divide (Mubarak, 2020).

The concept of the digital divide is defined as an expression that indicates towards a gap that exists between regions and demographic locations on the basis of access to modern technologies of information and communication. Some regions may have complete access while other have limited to no access as all. This technology that is being used as the basis of defining this divide can be the connectivity to the internet, access of personal computers, and the television. Often times these technologies also include cell phones and smart phones in particular along with other software and digital hardware that are related to the operations of the technologies. Basically the concept talks about communication related to the inequality on the social levels and access to information and the

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most general concepts to be discussed under this term are exclusion and inclusion in certain societal or social divisions (Desta, [2018](#)).

Typically, the experts elaborate digital divide as the inequality or imbalance that exists between the people residing in rural areas and those who live in urban areas; between different groups on the basis of socio-economic divide; between people on the basis of literacy and education; and, on a global level, between the countries on the basis of industrial development. However, the digital divide is also experienced among the populations where some people or sectors have access to the technology to some extent while others don't have any access or have complete access to the technology and technological devices. Furthermore, the digital divide can be viewed in form of computers that have lower performance, connections of internet use with lower prices like limited access to the content based on subscription and dial up; and lower speed of wireless connections (Hanna, [2021](#)).

Origin of the Concept

Earlier than the 20th century, the notion of the digital divide was mainly used for indication of the division among people who have and do not have access to the telephone. However, later in the 1990s, the elaboration of the term expanded and it was used for describing the divide between the people or sectors on the basis of access to the internet, broadband in particular. The concept of the digital divide, as mentioned earlier, instigated in the United States in the mid 1990s and the first appearance of the word in an officially published document was made in the year 1999 in the "National Telecommunication and information Administration of the US Department of Commerce". Nevertheless, much confusion is caused by the word digital divide and as a matter of fact it is used as a metaphor that has resulted in four misunderstandings first being the suggestion that it is a straightforward difference between two groups that are divided with a cavernous gap. Secondly, the term suggests that it is difficult to bridge the gap. Third, the condition of the digital divide is not permanent and inert and lastly, it implies utter inequalities of relative nature between the groups of inclusion and exclusion (Jamil, [2021](#)).

Types of Digital Divide

The concept of the digital divide refers to the unequal distribution of access to technology and the internet across different regions or populations. This divide can exist in various forms, including social inclusion and exclusion, gender, and universal accessibility of technology. Women and marginalized groups are often excluded from digital access, which can have negative impacts on their economic, educational, and social opportunities. The causes of the digital divide include lack of education, access, affordability, motivation, and knowledge of technology. This divide is often present in three stages: the economic, ability to use, and empowerment divide. The COVID-19 pandemic has highlighted the severity of the digital divide, with online learning and remote work becoming more prevalent. To bridge the divide, governments, commercial, and non-commercial sectors need to work together to improve access to technology and the internet for all. There are a number of types of concept that have an impact on the efforts gaining access to the internet, however; the most clear gaps are social, gender and universal access divide. The access to internet results in the development of relationships and social circles of people who have similar interest. The platforms of social media like Facebook and Twitter divide people online on the bases of shared interests. The social stratification of people is influenced through the availability and use of the internet (Pawluczuk, [2021](#)).

The gender based divide is prominent particularly in developing countries where even though there is a drastic dispersion of mobile creativity but it's not equal as the probability of a woman owning a mobile phone or accessing the internet is less than a man. It is analyzed that in the countries with low income, the chances of men having a mobile phone are 90% higher than the women and this can be described as 184 million women without access of a mobile and among the women who own a mobile phone, in the countries of low and middle income, 1.2 billion women lack access to the internet (Cruz-Jesus, [2016](#)).

The last type of digital divide under discussion is the universal digital divide that means that the individual who have physical disabilities do not have access to technology or they are not able to access software and hardware for use. According

to the "Digital Divide Council" such a divide can be a result of lower levels of education, illiteracy of digital knowledge, and poor infrastructure of broadband. In today's digitally connected world, access to technology and the internet has become increasingly important. The rapid growth of digitalization has made it possible for people to connect with each other from different corners of the world. However, despite the growing availability of technology and the internet, the digital divide still persists at an alarming rate. This divide is characterized by unequal access to technology and the internet, resulting in unequal opportunities for people to participate in the digital world (Bilozubenko,2020).

One of the key themes identified in this context is the social stratification of people due to the availability and use of the internet. Social media platforms such as Facebook and Twitter provide people with the ability to connect with others who share similar interests. However, this also means that people who do not have access to the internet or technology are left out of these social circles, resulting in social stratification. Another important theme identified in this context is the impact of the digital divide on the economy and society. The divide results in unequal opportunities for people to participate in the digital economy, which can have a significant impact on their economic well-being. Additionally, the digital divide can also lead to a lack of access to vital services, such as healthcare and education, which can have a detrimental impact on society as a whole (Fang, 2019).

Furthermore, a lack of access to technology and the internet can also result in a lack of digital literacy and skills. This can lead to a lack of understanding of how to use technology effectively and efficiently, which can result in further marginalization and exclusion of individuals and communities. The key themes identified in the context of the digital divide emphasize the importance of bridging this gap to ensure equal access to technology and the internet for all. It is important for governments, non-governmental organizations, and the private sector to work together to address the causes and impact of the digital divide to create a more inclusive and equitable digital world (Myovella, 2021).

There is no doubt that access to the internet or even computers is growing with a remarkable

rate more rapidly due to digitalization but at the same time, the digital divide also continues to preserve dramatically and at an upsetting rate because of certain reasons and causes a certain impact on the economy and society.

The Contributing Causes to the Widening Digital Divide

A digital nature divide can be caused by a number of different factors for a variety of different causes. There is a risk that individuals will not have access to the internet, and this reduced level of access is frequently produced as a result of low levels of literacy. Those who have completed college degrees or who are currently enrolled in college have a greater possibility of enjoying the day-to-day benefits of the internet and the availability of computers, in comparison to people who have not completed college degrees or who are not currently enrolled in college. A lower level of income is another consideration, given that people with higher levels of money are more likely to have access to personal computers, digital hardware and software, as well as the internet, in comparison to people with lower levels of income. Wealthier households are more likely to have access to computers and internet connections capable of fast speeds (Gran, 2020).

Additional variables that have an effect on the digital divide or that contribute to its spreading include a lack of actual access to technology hardware and software, a lack of incentive to make use of the technology, digital illiteracy, and limits owing to geographical circumstances. In nations with a lower or middle income, the most significant obstacles for women to overcome in order to gain access to the internet or even mobile devices are illiteracy, fears regarding their own security and safety, a lack of digital skills, the expense involved, and a lack of approval from their families (Aissaoui, 2021).

The Price Paid for the Digital Divide

The unequal access to technology has produced significant differences in culture among different nations all around the world. The following is a list of some of the most significant areas in which the digital divide has an impact:

Access to Educational Platforms The internet provides users with access to a vast knowledge

library as well as educational platforms that can help them enhance their abilities. It is absolutely necessary to maintain connections with technological advancements for the sake of educational reasons in order to contribute to overall and individual prosperity (Ancker, [2017](#)).

Economy

The use of internet contributes to the economic productivity of a nation, which in turn contributes to the growth of the economy. Nevertheless, as the digital divide continues to spread, the economic gap also continues to widen, particularly in the case of developing countries.

The Social Dominance

In the modern world, communication is aggressively driven through the internet, and the platform of social media is what initiates the process of relationship building, engagement, and connections among families and friends. The regions suffer from a lack of connectivity as a result of the digital divide, and as a result, the social life of the people in those regions are also constrained, along with reduced innovation and creativity. Eliminating the digital divide is absolutely necessary in order to provide developing nations with the means to achieve their full potential. In addition to this, the effects that digital divides have on schooling and other social arenas also have repercussions for the economy as a whole (Dopico, [2019](#)).

An Examination and Evaluation of the Primary Problem

Stages of Digital Divide

The contemporary atmosphere in which we live, work, play, and educate ourselves in technology has caused digital platforms to become an orbit for our life. For the sake of achieving the development and progression of an economy, having a workforce that is based on computer-based technology has become vital. There have been previous discussions on the three primary categories of the digital divide; however, there are also other stages that can be observed in the partition of regions or populations based on whether or not they are digital. These stages are also sometimes referred to as the types of the

digital divide and are known as the economic divide, the usability divide, and the empowerment divide, where the divide on the basis of the economy is considered to be a non-issue but due to the divide of usability and empowerment, huge populations and regions of people get disconnected and get deprived of the potential of accessing the internet (Ancker, [2017](#)).

The economic divide is based on people's capacity to buy the hardware and other equipment required to use technology. This split can be resolved by effective planning on the part of government levels to eliminate poverty and improve the economic state of the nation as a whole. After the economic divide comes the usability divide, which asserts that even after people have obtained computers and access to the internet, the literacy of using the technology is another thing entirely, and a lower level of literacy is what causes this divide. The usability divide comes after the economic divide. The final stage of the divide is the empowerment divide. Both the economic and usability divides are not that difficult to overcome. After the acquisition and knowledge of operating technology, the final stage is to utilize the technology for personal and economical productivity. However, not everyone is guaranteed to utilize the technology for positive use and take advantage of opportunities like these (Gómez, [2018](#)).

The Digital Gap in an Age Characterized by the COVID-19 Epidemic

It was during the time of the COVID-19 pandemic that social isolation, regulations, and restrictions led to a shift towards the practise of learning, working, and operating businesses from the comfort of one's own home with the assistance of the internet. Since that time, the population of the entire world has come to heavily rely on internet access for social support, work, information, and school. Internet access in many rural and developing countries is either extremely limited or completely nonexistent, which was already an issue even before the outbreak, but the pandemic has made the situation even worse because being online is now essential for the majority of people (Bilozubenko, [2020](#)). Because of this predicament, developing countries and rural areas that have inadequate internet connectivity are doomed to

face certain difficulties. These difficulties include a loss of jobs, training, skills, and talent; restrictions on the learning environment; and limitations on one's ability to access telemedicine services. In addition, the regions that only have access to the internet at slower speeds have not only been dealing with the issue of the congestion problem getting worse, but the speed of the internet itself has slowed down all over the world. Internet connections in regions with limited access and lower bandwidth have been unable to fulfill the working conditions and demands of multitasking technological gadgets because of the digital divide (Nguyen, 2021). These regions also have limited access. Students all over the world have been suffering from a lack of accessibility to the internet as well as the equipment necessary to learn and attend classes online. This is in addition to the working people as well as the institutions and organisations that are being severely impacted by the digital divide, particularly in this age of the pandemic (Chetty, 2018).

Recommendations

- Invest in infrastructure: To guarantee that high-speed internet is accessible to all residents, especially in rural and isolated locations, governments should invest in developing and extending internet infrastructure.
- To ensure that internet access is accessible for low-income families and individuals, governments should collaborate with internet service providers.
- Boost digital literacy by investing in initiatives that teach digital skills to marginalised areas. This includes instruction on digital citizenship, online safety, and computer skills.
- Technology firms and governments should collaborate to develop and deliver accessible technology for individuals with impairments and other disadvantaged populations.
- Encourage public-private partnerships: Public-private partnerships can help close the digital divide by pooling resources and knowledge from both industries to give underserved populations access to the internet, training in digital skills, and other services.

Conclusion

The advent of the internet and social media platforms such as Facebook and Twitter have revolutionized the way people interact and communicate with each other. It has given rise to the creation of online communities where individuals with similar interests and beliefs can come together to form social circles, share their ideas and opinions, and engage in discussions.

However, the availability and use of the internet have also led to the creation of a digital divide, where certain groups of people have greater access to technology and the internet than others. This divide is not only limited to access to technology but also encompasses access to information and knowledge, leading to the social stratification of individuals based on their level of digital literacy and proficiency. The digital divide has become a significant concern in today's society, as it has the potential to exacerbate existing social inequalities and prevent marginalized communities from accessing the same opportunities as those with greater access to technology. Women, people living in rural areas, and those with low-income levels are often the most affected by this divide, further entrenching their disadvantage in society.

Moreover, the divide can also lead to the creation of online echo chambers, where people are only exposed to ideas and opinions that reinforce their pre-existing beliefs and values. This can limit their exposure to alternative perspectives and reduce their ability to engage in productive and meaningful dialogue with those who hold different views.

The social stratification that arises from the digital divide has far-reaching consequences, affecting not only social relationships but also access to education, employment, and political engagement. Therefore, it is essential to address this issue by promoting digital literacy and providing greater access to technology and the internet for all individuals, regardless of their socio-economic status or geographical location. By bridging the digital divide, we can create a more equitable society that values inclusivity and equal access to opportunities.

Taking everything in account, the need and requirement for the elimination of the digital divide cannot be denied. The world is transforming rapidly into a digital one and for staying relevant

and competitive, it is essential to grow digitally and eliminate the void as sustainable performance can only be achieved through bridging the digital divide and increase digital literacy. For fulfilling the gap, governments, nonprofit organizations, private organizations and other institutes have to take the initiatives and increase access for individuals. The UNESCO and International Telecommunication Union have also proposed a number of strategies for eliminating the divide that are mainly focused on digital inclusion, focus on digital literacy,

incorporation of access policies and taking control measures to enhance empowerment while providing safeguard to the children and users online. Even though the digital divide has been persisting ever since the emergence of technology, but the contemporary world demands digital inclusion for everyone and while the stages of economic divide and usability divide are plausible to overcome, the empowerment stage of divide needs much work and effort to be overcome.

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