

# Digital Divide: An Analysis of the Reproduction of Inequality Perpetuated by Technology

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## Abstract

*The term "digital gap" has received a lot of investigation in recent years, and its potential economic, social, and political ramifications have sparked significant discussion. This paper shows that the divide between those with access to ICTs and those without threatens social integration and fosters marginalization, and inhibits economic growth. It concludes that in order for India to close the digital divide, issues including illiteracy, the lack of skills and infrastructure, and the lack of investment in rural regions, must be addressed. Government efforts to close the digital gap should focus on connectivity provision and proper education at affordable rates for technical skill upliftment so as to bridge the gap.*

**Keywords:** *Digital Divide, Technology, Inequality, Marginalization*

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## Digital divide

In one of the scenes from the film *Gully Boy*, a character paints graffiti on the wall reminding us that, unlike the old times when we would demand *roti, kapda, and makaan* as our basic right, today we have entered a new age that strongly demands a fourth entity that is the internet. This holds a strong message about the needs and demands of the new age which cannot be brushed aside. We have

indeed reached a time where access to the internet has inevitably become a fundamental or basic right.

The COVID-19 pandemic has forced humanity to rely even more heavily on technology for basic needs, and daily living including acquiring basic items, maintaining connections with others, working from home, and being able to finish studies. This makes the function and value of technology abundantly clear. Today's civilization requires a high-speed Internet connection, commonly referred to as broadband, in order to function.

Millions of individuals, however, find it extremely difficult to carry out these simple chores because they either don't have access to high-speed Internet or they choose not to use it, which has a negative impact on their capacity to engage in social, political, and economic life. This amounts to a kind of disparity in terms of access to internet-based services and digital technology which is often referred to as the digital divide.

The phrase "Digital Divide" was first used by Larry Irving Jr. to describe the uneven and disproportionate rate of progress in societies having access to digital infrastructure and services. It highlights the disparity in access to digital tools, techniques, and information technology among people. The definition of the digital divide might change over time and between different contexts.

### **How do we define the digital divide?**

OECD defines Digital Divide as “the gap between individuals, households, businesses, and geographic areas at different socio-economic levels with regard both to their opportunities to access information and communication technologies (ICT) and to their use of the internet for a wide variety of activities” (OECD, 2001).

Gourova, who wrote a paper for the Digital Opportunity Initiative on behalf of the Joint Research Centre of the European Commission, draws on some of the several definitions used to describe the phenomenon and offers the following comprehensive and all-encompassing definition: “Digital Divide is defined as the gap between nations that can and cannot afford the technology, between the businesses and consumers enjoying the advantages of the Information age and those still awaiting its benefits, as the divide which separates the haves from the have-nots in the sphere of information, or as the exclusion of those who are poor, illiterate, rural or non-English speaking.” (Gourova et al., 2001, p.8)

Manuel Castells (2001) simply defines it as the 'inequality of access to the Internet', while Pippa Norris identifies three types of the divide: the global, the social, and the democratic. The global refers to the divergence of Internet access between industrialized and developing societies. The social is the gap between the information rich and poor in each nation and, lastly, democracy is the difference between those who do and do not use the panoply of digital resources to engage, mobilize and participate in public life. (Norris 2001, p.4)

The aim and objectives of this paper are to uncover the nuances and complexities of the digital divide which has become a fundamental issue today showing its glaring evidence in the post covid scenario.

The digital divide affects those who do not have access to or adoption of the internet and technology. The effect of this structural reality, which has been dubbed "digital redlining," is to further entrench social and economic inequality in society. Social professionals are urged by this injustice to get involved in programs and policies aimed at bridging the digital gap.

## **History of the internet**

The mobilization and development of the Internet were made possible by public support amounting to billions. The Advanced Research Projects Agency (ARPA), which made significant investments in computers by erecting mainframes at academic institutions and other research facilities, laid the foundations for the Internet in the 1960s. The ARPANET network that was created by ARPA served as the Internet's forerunner. ARPANET prospered as a result of public support for scientific collaboration, experimentation, and invention.

The creation of Internet protocols, which served as a universal language for widely disparate networks in the middle of the 1970s, allowed ARPANET to mature into the Internet. The National Science Foundation launched programs to connect institutions around the nation to the Internet. The Internet became more and more popular, which led to increased demand.

The US government started a process of privatizing a network developed at significant public expense in the 1990s. Private ownership of the Internet was promoted as advantageous and inevitable under the free market and deregulation environments of the Clinton Democrats and Newt Gingrich's Republicans. Stephen Wolf, the director of NSFNET, thought that releasing the Internet from governmental supervision would enable it to become a mass medium while also avoiding political and technological difficulties. Today, a selected few multinational businesses that control the market hold the broadband and Internet backbone. In the past, creating the Internet was a bold and financially dangerous proposition. Its creation required years of government investment and planning. The growth of the Internet can be compared to the development of other public services like electricity and water.

The digital gap covers issues of equity impacting individuals who either lack the knowledge and chances to access information technology or who are in a less equitable position in terms of utilization, in addition to the apparent issues of access to computers and connectivity. The need for digital literacy is emphasized as research on the digital divide advances. When it comes to technology, persons with low digital literacy may start to join the "haves" and obtain access, but they may also show resistance to using it since they don't know how.

### **Conceptual nuances**

The digital divide is also defined as the disparities in access to information via the Internet and other information technologies and services, as well as in the skills, knowledge, and abilities required to use information, the Internet, and other technologies, depending on factors such as geography, race, economic status, gender, and physical ability. The inequalities across cultures and countries are frequently referred to as the "digital gap". It also takes into account the disparities in the resources and abilities required for effective participation as a digital citizen, as well as the disparities in physical access to technology.

Due to the fact that a lack of technology results in a loss of information and understanding, the phrase is strongly tied to the "knowledge divide". Consequently, it may be claimed that this gap is bringing about a dangerous and perpetuating new form of poverty in society, namely information poverty.

The "haves" and "have nots" of the world's digital divide can be found both within and between any given country as well as in economically developed and developing nations alike. On that note, the nations of the world can be categorized into three groupings in this regard:

Wealthy nations are the main participants in the information and communication revolution. They stand to gain the most from this new technology.

There are certain developing nations that could profit from information technology. They strive to close the digital divide.

Other nations with the insufficient ability to gain from information technology run the risk of falling behind. These nations could talk about the structural injustices that limit their ability to take part in the information technology revolution.

An imbalance in access, distribution, and use of information and communication technology between two or more populations there are geographical, demographic, and social aspects to the digital divide issue. Because of the possibility for millions of people to pass up the chance to utilize computers and the Internet to improve their lives and land attractive employment, the digital divide also has philosophical and sociological aspects (Friedman, 2001).

"Digital divide" leads to disparities in material access to, usage capabilities of, and benefits from computer-based information and communication technologies that are brought about by specific stratification processes that create classes of information society winners and losers, as well as participation in institutions governing ICTs and society.

The digital gap is one of those divisions that affect industrialized and emerging countries alike, as well as some underdeveloped ones. Additionally, inequality between the "have" and "have nots" exists in developed nations. For instance, while being recognized as one of the top knowledge economies and network societies, the United States still struggles with the digital divide.

There are many different facets of digital divides in existence today, including gender, age, and wealth divides. Each of these has its own distinctive history, phenomena, evolution patterns, views, and bridging solutions and initiatives. The digital divide is a dynamic issue as a result of the ongoing growth of information technology and the advent of new technologies. According to Ahmed (2007), the digital gap is a complicated, dynamic issue with political, cultural, and ethical components.

### **Factors affecting access to the internet and technology**

Giving emphasis to the development of communication infrastructure and giving everyone in the nation, regardless of where they live, cheap access to information are the fundamental requirements for bridging the digital divide. There are several obstacles in the way of closing the digital gap. The following factors limit the advantages that socially and economically underprivileged communities in India can reap from using information technology and the internet.

### **Infrastructural obstacles**

India still lacks a strong telecommunications infrastructure, despite the rapid advancement of information technology since the early 1990s. Despite the Internet's growing adoption, the digital divide is widening as a result of the lack of adequate infrastructure, and considerably higher technological requirements. India is unable to create the needed infrastructure for professional training because of a lack of enough funds. India still lacks libraries and information centers that are well-equipped and have as their main goals increasing access to knowledge and lifelong learning. Even though India has seen great and steady development in the number of cybercafés, those with little means cannot afford to access them.

### **Skills and literacy hurdles**

India still lags behind in terms of the required technical skills and knowledge. The prevention of social division into the haves and have-nots is greatly aided by education and information literacy. Information technology (IT) literacy is crucial for enabling access to digital information. Information literacy education will be crucial in keeping societies in third-world emerging nations like India together and preventing them from becoming divided into information haves and have-nots.

### **Economic obstacles**

Individuals do not have the adequate means to pay for private cybercafés or their own internet connectivity in order to access digital information due to financial constraints or a lack of adequate funding.

### **Content limitations**

The free exchange of information between people on a worldwide scale is greatly facilitated by access to information technology. Since no one entity has authority over the Internet, anyone with access to it has the ability to spread their thoughts and knowledge. Therefore, if the issue of the digital divide is to be resolved, the government must make a concerted effort that is both time-bound and progressive to ensure that all citizens have access to information that is pertinent to their daily lives as well as the ability to create their own ideas or content for their communities and the Internet as a whole.

### **Language differences**

Language serves as a vital means of communication between groups of people and as a source of information transmission. India is a multi-ethnic and linguistically diverse nation. We are currently living in an era of the information revolution, but since the majority of



material available online is in English, it presents a challenge or barrier for those living in nations where English is not spoken by the general public or masses. These factors affect accessibility and participation in the digital platform which leads to inequality.

### **Participation inequality**

In social networks and community systems, roughly 90% of users do not contribute, 9% contribute infrequently, and a tiny minority of 1% accounts for the majority of contributions. This disparity in participation is a manifestation of the empowerment divide that has persisted throughout the years of Internet growth.

According to the aforementioned talks, the global issue of the digital divide is very complicated and widespread, but its causes vary depending on the nation and its circumstances. This section examines many factors that contribute to the digital divide in India. Since India is currently developing its ICTs, technology is employed to measure internet penetration and usage.

### **Connectivity and understanding issues**

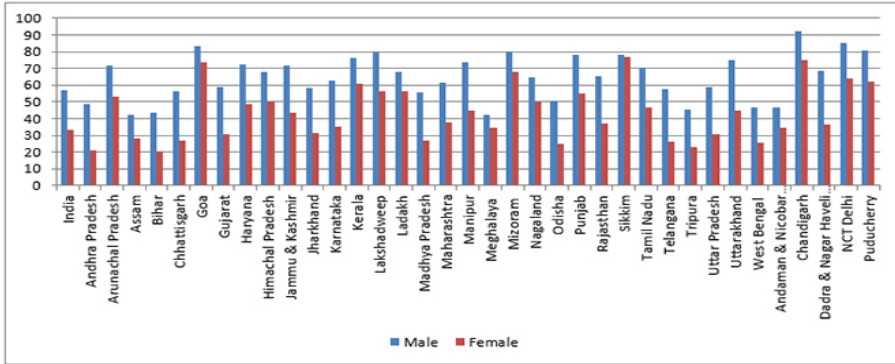
In urban India, 34% of people use smartphones, making it the country with the highest penetration rate (Ericsson Consumer Lab, 2015). When utilizing mobile networks indoors, 63 percent of urban mobile internet users have challenges with quality and dependability, such as dropped connections and variable network speeds. 68 percent of urban mobile internet users report experiencing app-related problems when walking or commuting. These include significant lag times that prevent playing online games, slow app refresh times, loading issues with maps, and session failures. Consumers should pick the tariff that best fits their needs when choosing a data plan, but only 12% of urban mobile internet users go to their operator's website to reload, pay bills, or access other services, and 55% of urban mobile internet users claim they are confused by the details of their data plan options.

## **Rural-urban digital divide**

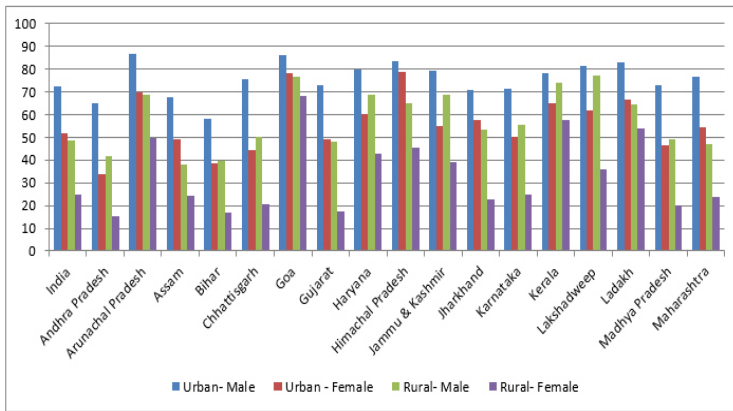
Location is one of the characteristics that affect how easily people can access it. According to Hindman (2000), despite the clear advantages that ICTs offer to geographically secluded rural individuals, rural citizens are still likely to lag behind urban residents due to a lack of telecommunications infrastructure and cultural differences. Geography, according to Chen and Wellman (2004), is one of the important factors influencing people's access to and usage of the Internet, with more affluent regions having higher Internet penetration rates than less affluent regions.

## **Figures and statistics**

According to Bloomberg, 600 million people in India use the internet, which is more than 12% of all users worldwide. However, just 20% of Indians, according to official data, are adept at using digital services, despite the fact that 50% of the population does not have access to the internet. According to the World Telecommunication/ICT Indicators Database of the International Telecommunication Union, just 43% of people in India use the internet. IAMAI-Kantar Report ICUBE 2020 estimates that 58% of males and 42% of women in India utilize the usage of internet. Another foundation for data segregation is the distinction between rural and urban areas. Compared to 72.5 percent of urban males and 51.8 percent of urban females who have ever used the internet, only 48.7 percent of rural males and 24.6 percent of rural females match this condition. In all states, men live in urban areas in greater numbers than women who live in rural areas, which is interesting to notice.

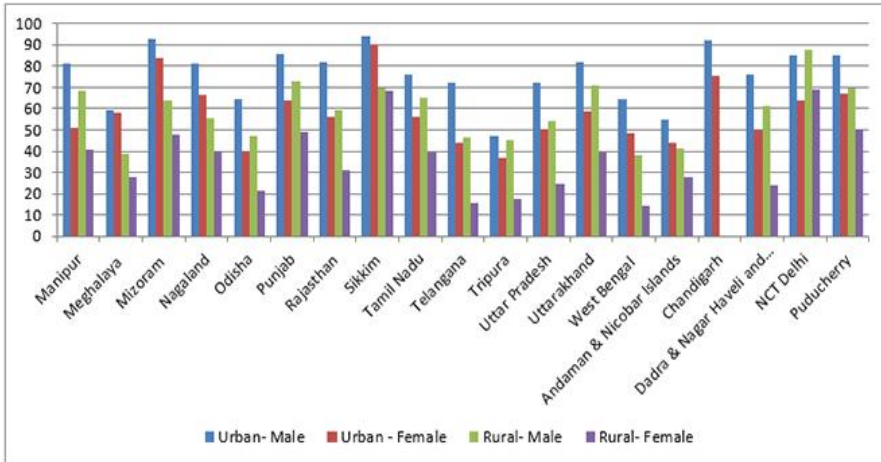


**Figure 1: (%) individuals who have ever used the internet- State-wise gender divide**  
 Source: Data from NFHS 2019-21<sup>1</sup>



**Figure 2: (%) individuals who have ever used the internet- State-wise gender and rural/urban divide**  
 Source: Data from NFHS 2019-21

<sup>1</sup> Only 43% of the population in India uses the internet, according to the ITU's World Telecommunication/ICT Indicators Database. According to the IAMAI-Kantar Report ICUBE 2020, 58 percent of men and 42 percent of women in India use the internet. However, the National Family Health Survey 2019–21 ("NFHS") reveals a far wider gender disparity in internet usage. According to the NFHS Report, just 33.3 percent of women and 57.1 percent of men in each gender had ever used the internet. As shown in Figure 1, this gender difference existed in all states.



**Figure 3 (%) individuals who have ever used the internet- State-wise gender and rural/urban divide**

**Source:** Data from NFHS 2019-21<sup>2</sup>

Additionally, there is a large digital divide across the many underprivileged caste groups. For instance, according to certain studies, "ST folks have 27 percentage points less access to the Internet than the other individuals."

Along with it, as has been noted, India suffers from a severe digital divide, with disparities in internet usage and access to digital infrastructure based on factors such as gender, caste, age, and place of residence (rural vs. urban). Men tend to own more mobile phones and have greater access to the internet, according to widespread observation. Urban men are significantly better off than others in terms of having access to the internet and owning phones as compared to urban women, rural men, and rural women, although there may be slight variations.

<sup>2</sup> The NFHS offers data segregation based on the distinction between rural and urban areas. Only 48.7 percent of rural males and 24.6 percent of rural females meet this requirement, compared to 72.5 percent of urban males and 51.8 percent of urban females who have ever used the internet. It is interesting to notice that, as seen in Figures 2 and 3, urban males make up the largest percentage across all states, whilst rural females make up the lowest percentage.

The digital divide was glaringly visible during the Covid-19 pandemic when the whole world had to switch from an offline to an online mode of work and life. While for many this shift was smooth but there were subsequent numbers of people for whom this turned into a catastrophe that came up suddenly and with the least anticipation. Moving down we look at how the digital divide impacted the education sector, further perpetuating divisions in society.

### **The digital divide is leading to a knowledge divide**

According to classical economics, the three "factors of production" are land, labour, and capital. Improved total and relative resource allocation to these factors have been a major focus of development policy. The argument over development has recently included a new element of the production, one that is said to have surpassed the other variables in importance: knowledge is now seen as the primary force behind innovation and development.

Knowledge has been recognized as one of the primary, if not the primary, factors in development. Indeed, the concept is intriguing. Knowledge can be introduced and used effectively in situations when natural resources are limited, FDI is not flowing into the country as planned, or land is scarce or not fertile. In the World Bank's nearly poetic words, "Knowledge is like light. Weightless and tangible, it can easily travel the world, enlightening the lives of people everywhere." (World Bank 1999, p.1). The difference between developed and underdeveloped, between poor and rich countries, is becoming more and more understandable.

The high rate of knowledge growth has been primarily attributed to the expansion of scientific knowledge production, which is backed by advancements in information and computer technology, the access to which is marked by stark inequality. The growth of knowledge also

implies the growth of ignorance (Evers and Menkhoff 2004). Every new understanding raises fresh, unanswered queries. As we gain knowledge, we become more aware of our ignorance. In this sense, unconfirmed knowledge grows more quickly than ignorance or "known not-knowing." The use-value of information to poor people is not often taken into consideration when knowledge is produced; rather, it occurs within a framework of markets and power systems. Old knowledge may become outdated and be replaced by new discoveries, but important local knowledge may also disappear before the onslaught of knowledge systems is perceived to be superior. Not only does research provide new knowledge, but it also eliminates traditional or old knowledge. In this way, ignorance is increased rather than knowledge. The digital divide affects how knowledge and ignorance are distributed.

The monopolization of the application of knowledge through patents and the insistence on protecting intellectual property rights by strong organizations, like the WTO, exacerbate the knowledge gap whether on purpose or accidentally. Poorer countries and people are excluded from access to vital 'knowledge goods', such as medicines, seeds, and educational materials (Oxfam 2001). Selling knowledge in the form of licenses, franchising, and overseas education has developed into a multi-billion dollar business for the OECD countries, which capitalize on the knowledge gap between them and the developing world.

Shoshana Zuboff (2018) argues how only a few multinational companies' platforms like Facebook and Google monopolize the ownership of knowledge creation and knowledge production. While we may think that they are serving our needs substantially, we often tend to forget and thus oblivious to how we are in return used as mere chattel through whom they could gather information to serve their own profitable ends. She calls this surveillance capitalism which

leads to epistemic inequality. Digital platforms pursue and collect more aspects of once private experience as raw material for datafication, manufacturing, and sales as surveillance capitalism grows. Elemental epistemic rights can no longer be taken for granted under these unheard-of circumstances. But unlike the totalitarianism of the 20th century, surveillance capitalism does not threaten terror and murder with armies and henchmen. It is a new instrumentarian power that employs pervasive digital technology to manipulate subliminal cues, psychologically target communications, impose choice architectures, activate social comparison dynamics, and levy rewards and punishments. All of these actions are designed to remotely tune, herd, and modify human behaviour in the direction of profitable outcomes while always maintaining users' ignorance. Put simply, “Who knows?” “Who decides who knows?” “Who decides who decides who knows?” The answers to these questions determine a society’s progress toward epistemic equality.

### **The digital divide in education**

The COVID-19 epidemic has primarily affected the education sector. Since March 2020, more than 276 million students in India have missed significant amounts of school as a result of the closures of schools. The organization of education, teaching, and learning was the first area where the ongoing lockdowns had an effect. The traditional classroom teaching approach has been attempted to be replaced by the digital medium in educational institutions. Additionally, a lot of countrywide school-age children lack access to smartphones or high-speed internet. Only a small number of wealthy private urban schools were able to use an online teaching methodology; others were unable to do so due to a lack of access to e-learning tools.

This study shows that the digital divide may be addressed from a

social standpoint and is not just a technological divide. This institutional reality leaves marginalized groups socially excluded and necessitates action from politicians to rectify equitable inequalities in educational possibilities.

As has been already discussed, the availability of services, knowledge of digital devices, their level of usage, the chance to learn and utilize new media, experience, skills, support, language, region, gender, etc. are a few possible factors along with the socioeconomic status (SES) variables like family income, parental education level, and parental employment status have been linked to computer and internet access and likewise in education and learning today.

Therefore, compared to children from low SES areas, children who reside in locations with higher SES variables (such as household income and parental education) are more likely to use information technology frequently and for a longer period of time. Compared to pupils in less affluent institutions, kids from wealthy schools have much more access to and use computers and the internet. The human right to receive information and education is violated by this kind of imbalance in access (see Article 26 (1) of the UDHR). This disparity was made even more apparent by the disruption caused by the global pandemic in the education sector. India was not an exception.

Due to the contagious nature of the disease, the traditional classrooms in physical venues were converted into online or virtual lessons during the extended closure caused by the Covid-19 outbreak. Teaching and evaluating pupils through the use of ICT was done primarily to close the learning gap caused by the lockdown. The study's impetus is the increased visibility of inequities in the school system during the period of COVID-19. In the wake of the epidemic, many children in South Asia have been adversely affected by poverty, health problems, and a lack of education, according to a UNICEF report. Long, strict lockdowns have had a negative impact



on many daily wage employees' and marginalized groups' incomes, leading to preventable dropouts. The United Nations Sustainable Development Goal #4, "Ensure inclusive and equitable quality education and encourage lifelong learning opportunities for all," has also been harmed and its progress has been shelved by the pandemic.

According to a poll performed by Oxfam India (May-June 2020) in 5 states of India, more than 75% of parents experienced financial hardship during the first year of the pandemic. There were numerous obstacles to helping kids access digital education. They had issues with affordability and internet accessibility. While these issues were widespread in all the states surveyed, over 40% of parents in Jharkhand lacked the necessary equipment to access digital education.

Not only children and students but teachers too had to face obstacles and hurdles followed by the switch to an online platform of learning. Nearly half of the teachers (48%) said they had difficulty providing instruction digitally.

The tools required to deliver instruction online are unavailable to two out of every five teachers. Additionally, the provision of lunches and textbooks during the epidemic has not been taken into account by digital schooling. Eighty percent of parents reported that their children lacked the necessary texts for their online classes, and 35% of parents indicated that their kids didn't receive a midday meal. In the second year of the pandemic (2021), Oxfam India did a study akin to this one and discovered that there are problems with digital learning that go beyond access and include pedagogy. In online classes, one-fifth of the students found it difficult to ask questions.

Although the use of technology in education has received a lot of attention, very little has been done to close the educational digital gap. On May 17, 2020, the Government of India unveiled PM eVIDYA, a broad project that combines all initiatives connected to

digital, online, and on-air education to offer multi-mode access to education.

The need for using educational technology to enhance access, quality, and governance of education was emphasized in the 1986 Indian national educational policy, which was later updated in 1992. The national education policy 2020 places a strong emphasis on the efficient application of innovation to enhance student teaching and learning through the use of technology. The National Educational Technology Forum will serve as the vehicle for integrating technology into various facets of school education and higher education, according to NEP, 2020. The establishment of a "single national digital infrastructure to energize and accelerate the education ecosystem" is another goal of the National Digital Education Architecture, which is overseen by the Ministry of Education.

This is essentially a technological framework that aims to make it possible for current systems to be upgraded and made interoperable while also making the common building blocks and services for the development of new tools and solutions accessible.

## **Conclusion**

From the above arguments and explanation, one cannot deny the inevitably fundamental importance of the internet and technology in the present times. Right from reading the morning newspaper to booking tickets, sending emails, updating ourselves about various issues, and maintaining social and community ties, we are solely dependent on the internet. The right to the internet is no longer a luxury but a necessity, in the absence of which our world would fall upside down. To imagine a world without the internet and technology is unfathomable.

But if the internet and digitalization have brought us all together shrinking our spaces, it has also given rise to large-scale disparities

about which we have argued at length. But to us, given our easy access to the internet and technology, it is inevitable to take the availability of the internet and our large-scale dependency on it for granted. Likewise, it is hard for us to think that even in this fast-paced modern digitalized world dominated by technology, there exists a substantial portion of people who have not been able to reap the benefits of digitalization and technology. Maybe we bring in our own lifeworld, it is difficult for us to think and empathize with theirs. But given the data and statistics showing the large-scale disparity in terms of access and usage of the internet, one cannot deny the existence of the stark digital divide that we have discussed so far. So the key question to ask is whether digitalization and technology serve the needs of every individual equally or does it perpetuate more divisions within society.

We know we are living in times of knowledge and an information economy. Knowledge and information dominate the globe and our survival and sustenance on it. As Manuel Castells have argued key processes and activities are organized around networks central to which is the access and usage of the internet and technology. Anybody who is excluded from such networks lagged behind in terms of the consumption of information and knowledge. Such is the influence and impact of the internet and technology.

This disparity begets further divisions within society and the ones who fail to reach out and reap the benefits of technology continue to suffer. This issue should be addressed with utmost importance in the present times. To deliver information that is compatible with ever-evolving technology and points of access, education and training are essential components in bridging the digital divide for both individuals and library and information (LIS) professionals.

The promotion of social inclusion among excluded groups becomes an objective for the use of information technology (IT). That is, in

order to close the digital gap, people and groups must have access to IT and their IT-related skills must be improved. Broadband Internet access has been linked to improvements in community development, individual empowerment, and economic growth.

India's population can benefit from a digitally linked nation in terms of their entire development, and this digital inclusion can be achieved by bolstering and improving factors like digital literacy and basic infrastructure. The government has already made some initiatives, but it remains to be seen how far they have spread and whether or not people are benefiting. The Digital India program represents the start of a digital revolution, and if it is effectively carried out, it may truly make India digitally inclusive and help the nation thrive and develop. In India, a growing young population with access to and knowledge of technology can propel the nation up the development ladder and bridge the digital divide.

## **References**

- Behar, A., (2022). '*India Inequality Report 2022*', Oxfam India.
- Dasgupta, T., (2018). *India's Digital Divide*. Research Review International Journal of Multidisciplinary, 3(11), 689-693, India.
- Hans-Dieter E., (2010). *The Knowledge Gap and the Digital Divide*, World Scientific Book Chapters, in: Thomas Menkhoff & Hans-Dieter Evers & Yue Wah Chay (ed.), *Governing And Managing Knowledge In Asia*, chapter 4, 71-78, World Scientific Publishing Co. Pte. Ltd.
- Norris, P., (2001). *Digital Divide: Civic Engagement, Information Poverty, and the Internet Worldwide*. India: Cambridge University Press.
- Singh, S., (2010). *Digital Divide in India: Measurement, Determinants and Policy for Addressing the Challenges in Bridging the Digital Divide* 1(2), IJIDE. 1-24. 10.4018/ijide.2010040101.
- Zuboff, S., (2019). *The Age of Surveillance Capitalism: The Fight for a Human Future at the New Frontier of Power*'. New York: Public Affairs.

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