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Digital Divide

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Digital divide generally refers to the relative advantage individuals or groups of people gain over others as the result of their access to and use of communicative technologies, such as the Internet. This gap—or divide—is considered digital largely because many technological advances over the last half of the 20th century have been based on digital, as opposed to analog, technology. While some scholars have limited use of the term *digital divide* specifically to Internet diffusion and access, there are many who conceptualize being digital as including a wide variety of other information and communication technologies (ICTs) such as cellular phones, satellite television receivers, and personal computers. As these technologies were initially developed, there was little concern that they might contribute to the stratification of societies principally because they were cost prohibitive. More recently, however, it has become apparent that digital communication devices can be economically mass produced and distributed to a vast number of individuals—along with relevant knowledge and skill sets.

It has been well established, most notably by Everett Rogers, that innovations are typically diffused in an S-shaped curve where the number of adopters continues to grow so long as a relative advantage is perceived. Crucially, though, digital media technologies were not uniformly available or accepted in all sectors of national and international populations at equivalent rates due to economic, technological, political, and cultural factors. As a result of disparate adoption rates, a cleavage developed and then widened between digital haves and have-nots. It is important to note that the effects of the digital divide reach far beyond the actual diffusion of the innovations themselves. Most scholars now agree that technologies, digital or otherwise, are value-free and should be viewed as deterministic. This is to say that no technology is inherently good or bad or democratic or capitalistic. Rather, these and any other moral characteristics exist in the individuals and the crucial uses they make of communication technologies. In the case of the digital divide, the unequal diffusion of digital communication technologies often reinforces socioeconomic, political, and cultural chasms precisely because of the different uses that individuals make of these technologies.

Equally important are the ways in which the digital divide operates on a number of different social levels. First, there is an easily observable individual level digital divide. Here, individuals who have access and are able to harness the advantages of digital technologies contribute to their own socioeconomic advancement above other individuals with less access to digital technologies or who have merely lower levels of technology literacy. Second, intrastate digital divides are increasingly apparent among populations within different countries such that entire regions are technologically behind the diffusion curve of the rest of the population. This situation typically increases the economic and cultural distance of such regions (such as more rural areas) from other areas of the nation. Third, interstate digital divides have emerged across different countries that have high and low levels of digital technology diffusion. This particular development positions less developed countries as even less able to compete equally in the globalized marketplace because of the very same limitations in resources and infrastructure that had already hindered their development.

In other words, instead of promoting a more equitable social arena with more opportunity for socioeconomic, political, and cultural unification, the unequal distribution of digital communication technologies can actually contribute to the maintenance and

even the exacerbation of social hierarchies. Moreover, the effects of the digital divide can be felt across social levels, and it is evolving and ongoing—that is, even in the instance that an individual, region, or nation can catch up to a certain level of digital technology deployment, the rapidity with which new innovations are reached nevertheless renders them technological laggards who are unable to fully engage with their more advanced counterparts. Such a situation has been particularly evident during the transition to broadband Internet and Web 2.0 applications where only a relatively small portion of the online population can actually make full use of the Internet's most participatory and perhaps most efficacious functions.

Nearly all scholars and policymakers agree that the digital divide needs to be narrowed on all social levels. Closing those gaps, however, remains a challenging task. In many cases, ICTs are most likely to benefit individuals, groups, and nations who have the resources to adopt them relatively early in their diffusion curve—so long as the particular technology, service, or device is also deemed by other individuals and groups to offer similar relative advantages. Investment in unproven technologies, though, is often fraught with risks and realistically may be undertaken only by those individuals or groups with a certain level of resources and expertise in existing technologies. In some cases, communication technologies have been reported to enable *leapfrogging*—a phenomenon that suggests that stages of technological, financial, and human investment can be bypassed during the development process. One such example is the relatively widespread implementation of cellular phones in countries where little to no landline phone infrastructure existed, but few other examples have been empirically observed. This apparent lack of examples has led scholars to consider leapfrogging a largely theoretical idea, with few practical applications.

Research has also demonstrated that simply providing access to digital media technologies is unlikely to entirely resolve any existing digital divides. This is because not all users are able to complete the same functions or use the technology to the same capacity as other, more experienced users. Thus, there is evidence of a second-level digital divide even among populations that already have access to and use digital communicative technologies. Precisely because the digital divide operates both across as well as within social and technological levels, ICTs still, paradoxically, threaten to fragment and disempower those individuals, groups, and nations that exist as being digital have-nots from those with the technological, financial, and personal resources to tap the remarkable potential of modern digital media technologies.

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See also

- [Diffusion of Innovations](#)
- [Knowledge Gap Hypothesis](#)
- [Technological Determinism](#)
- [Technological Literacy](#)

Further Readings

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