

Discussion-4 How has the proliferation of the internet, online, and computer technologies impacted countries

Discussion Topic:

Technological change offers great opportunities. However, it also causes disruption. While technology presents many benefits to those who can afford access to it, those without quickly fall behind. At a global scale, many underdeveloped countries still have limited access to technology. How has the proliferation of internet, online, and computer technologies impacted underdeveloped countries? How do those compare to the impacts on developed countries?

My Post:

Part 1

Hello Class,

The internet has impacted societies and economies for both underdeveloped and developed countries. However, this impact is significantly different in terms of accessibility to technology and the outcomes from it, with developed countries experiencing significant benefits from it while underdeveloped countries experienced few benefits, as they struggle with affordability and accessibility to technology. This post explores these differences, commonly known as the digital divide, and discusses their economic, social, and educational consequences.

The digital divide refers to the situation in which some people have access to modern information technology while others do not. The underlying assumption motivating the term is that people who use cell phones, computers, and the Internet have opportunities denied to people without access to these devices. The idea of a digital divide became popular in the mid-1990s with the rapid growth in popularity of the World Wide Web.

(uCertify, 2025, Section 146).

Impact on Underdeveloped Countries

Underdeveloped countries are typically characterized by low income and limited infrastructure. This poses challenges for the countries as it limits the access and implementation of digital technology like the internet. Despite these barriers, the internet could potentially help these countries to bridge economic and educational disparities. In a 2021 report from the United Nations, it identified that 46 of the most undeveloped countries are facing digital connectivity (IEEE, n.d.). For example, in South Sudan, only 7 percent of the population has access to electricity, and only 8 percent of the population of Chad has access to electricity. Such minimal electrical infrastructure (electrical grid) has an enormous limiting factor on the ability of individuals to access any internet services. This situation creates a vicious cycle, where these underdeveloped nations struggle economically, consequently limiting their capacity to invest and develop their infrastructure, which in turn limits their internet access and reinforces economic stagnation, restarting the cycle all over again. Moreover, this cycle of economic stagnation, by limiting access to technologies like the internet, prevents individuals from accessing robust education, particularly higher education. This, in turn, hinders them from acquiring the knowledge and skills

needed to improve their countries' economic and social frameworks, further exacerbating the digital divide between these countries and more developed nations.

Impact on Developed Countries

On the other hand, developed countries having advanced infrastructure were quick to adopt the internet. The internet had mostly a beneficial impact on the economies, social frameworks, and the education institutions of those countries. The internet has contributed significantly to the GDP growth of these countries. Research shows that an average of 3.4 percent of GDP across large economies is attributed to the internet (Manyika & Roxburgh, 2011). Additionally, the internet increased access to educational resources and helped students to develop digital skills. It allowed for the implementation of distance learning, which opened up educational opportunities to students who would otherwise not have access to education (United Nations, 2020). Furthermore, the internet also improved healthcare by giving access to AI technologies that help to save lives, diagnose diseases, and extend life expectancy in developed countries (United Nations, 2020). Finally, it has also improved access to social services, making it easier for individuals to understand and apply for services.

Comparing Impacts

Both underdeveloped and developed countries have experienced impacts from the implementation of the internet. However, underdeveloped countries experienced challenges in terms of accessing the internet due to infrastructure, affordability, and digital literacy issues. The table below compares how the internet impacted undeveloped and developed countries.

Table 1
Comparison of Undeveloped and Developed Countries Internet Impacts

	Underdeveloped Countries	Developed Countries
Economic Impacts	Limited infrastructure, affordability, and digital literacy; risk of exacerbating inequalities. For example, only 36% of the population in the least developed countries use the internet.	Significant contribution to GDP growth (3.4% on average in large economies) ; job creation and transformation; enhanced business performance.
Social Impacts	Improved healthcare and education; empower minorities; cultural changes; potential for technological leapfrogging.	Improved healthcare and education; changes in the workforce; social media and fragmentation.
Educational Impacts	Increased access to information; digital literacy challenges; need for infrastructure.	Increased access to educational resources; digital skills development; equity and inclusion; adapting education systems to the digital age.

Note: The table compares how the internet impacted undeveloped and developed countries. Data from several sources (Manyika & Roxburgh, 2011; Muhleisen, 2018)

To summarize, the internet has impacted both developed and underdeveloped countries. However, the benefits for these impacts have been disproportionately experienced by developed countries. Underdeveloped countries encounter significant limitations in accessing and utilizing the internet,

restricting their economic growth, which, in turn, perpetuates a cycle of disadvantages and economic stagnation. This digital divide not only affects access to technology like the internet but also areas like economic development, social advancement, and education.

-Alex

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