Special Conference on Telecommunication (SpCT)

Improving internet access in LEDCs

Research Report

Leiden Model United Nations 2023

"let us sing songs of freedom together"

Forum: Special Conference on Telecommunication (SpCT)

Issue: Improving internet access in LEDCs

Student Officer: Medea Beridze

Position: President

Introduction

The Internet is a privilege which many people around the world enjoy. We use it for various reasons which may include connecting with others, learning and accessing news information, being more educated, keeping us entertained, and many more. Access to the internet in our world today has been extremely important for our economic growth, education, healthcare and the development of our society. With many people having access to the digital world, there are still countries which are lacking internet access. The urgency of this issue is vastly increasing as the world is becoming more connected and digital. Lower economically developed countries (LEDCs) and more economically developed countries have a massive contrast in terms of internet quality, which means that many people living in these LEDCs do not have the access to connectivity, access of information, education and the many luxuries that come with having access to the internet.

Due to the 2020 Coronavirus pandemic, using the internet became more of an urgency than before, as this was the only means where people could safely attend school lessons, or even do their jobs. This created a very large division in development, as places where internet access became more scarce, children did not gain any education and people lost jobs due to incapability of being able to do them through the internet.

Definition of Key Terms

Internet access

Internet access is the ability for people around the world to connect on the connected global network which allows individuals to have easier access to things such as education, information, and other resources. The United Nations human rights council declared access to the internet a human right in 2016, and therefore access to the internet is now considered a right.

Less economically developed country (LEDC)

Less economically developed countries, also known as LEDC, are countries with lower levels of economic development. This entails countries with a low GDP, lower income per capita, lower employment, limited infrastructure, etc. Examples of less economically developed countries would be Afghanistan. Bangladesh, Haiti, etc.

More economically developed country

Contrary to LEDC, more economically developed nations (MEDC) are countries which have a higher economic development. This entails countries with a high GDP, high employment rates, access to high quality education, etc. Examples of more economically developed countries would be the USA, Canada, Japan, etc.

Internet Kiosks

An internet kiosk is a physical computer terminal or interactive booth which has access to the internet, internet browsers or wired internet connection. These kiosks are usually located in a public area which is accessible for many people, such as airports, malls, libraries, hotels, and other places.

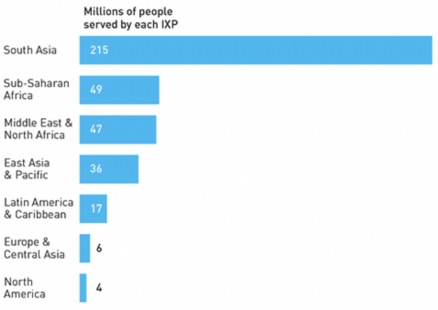
General Overview

Access to the internet is in our modern world a significant luxury which makes our lives significantly easier, more educated and makes us more connected. Internet adoption has doubled since the year 2010, however unfortunately a large portion of the world does not have access to the internet. This large portion of the world which does not have sufficient access to the internet is in Africa and Asia. Specifically, the top ten countries which have high numbers of people not connected to the internet include India, China, Pakistan, Nigeria, Bangladesh, Indonesia, Ethiopia, Congo, Brazil and Egypt. Poverty in a country is very much related to access to the internet, in fact, if a country has internet the chances of its poverty being reduced is very high. Over the last 20 years, companies and organizations have created billions of dollars worth of economic activity and jobs.

This issue has many layers to it, however mainly, the factors that keep so many people disconnected are price, relevance, and unfamiliarity. These factors affect the accessibility of the internet for people in LEDC, as they make it difficult for everyone to be connected. The most obvious factor is price, as access to the internet is expensive, and technology to connect to the internet is also extremely pricey. In more remote areas, there aren't any places where people could purchase internet plans, nor technology to connect to the internet, such as computers, phones, etc.

Firstly, the internet is unaffordable for developing countries. At the present costs of internet usage, only 17% of people in South Asia and 11% of people in sub-Saharan Africa can afford internet usage. To make the Internet affordable for everyone in these developing countries, global prices would need to drop by 90%, which is very unlikely due to the cost of infrastructure in our modern day. At the current prices, internet suppliers in developing countries have negative data margins. To help this issue, we must make access to the internet cheaper and more efficient. This can be accomplished by updating data infrastructure, especially by interchanging 2G systems with 4G and 5G ones. This also means that more data centers, internet kiosks, and internet exchange points would be built in developing countries, which would provide infrastructure that connects national and international networks and allows more affordable internet connections. Currently, in North America each Internet exchange point allows 4.1 million people to be connected, in comparison to South Asia, which allows 215 million people to enjoy internet access. If more Internet exchange points were built in developing countries, access to information, employment, opportunities and economic growth would increase.

Exhibit: **Internet Infrastructure around the World**
Internet accessibility can be measured by how many people are served by each Internet exchange point (IXP). The lower the number, the better the access.



Source: International Telecommunications Union, Packet Clearing House, World Bank, World Development Indicators

We also know that when the price of internet access falls, the market for internet content and entertainment in developing countries will grow fast, as it becomes more accessible. Additionally, a large portion of the people living in developing nations are uneducated and unaware of any details about the Internet, and there is a common misconception between these people that the Internet is impossible to afford. People tend to feel hesitant about getting internet plans, as they feel that the option is too much of a luxury that they will not be able to afford. However, luckily many nations are taking initiative to combat this slight issue. For example, in Sri Lanka, local business owners have started training facilities for people to learn how to make the most of the internet, and how it does not need to be seen as a tool which is non accessible.

Major Parties Involved

Governments

Governments are able to attract more people and convince their country's population to invest in internet plans. They also have the power to increase the availability of internet services, and can improve the country's internet infrastructure, by building internet kiosks, internet ports, etc. Governments can also collaborate with other governments and international organizations to support people with digital access.

Telecommunication operators & service providers

Telecommunication operators and service providers are able to change and modify their contracts for people in developing nations to be able to afford internet access. They can also set up low cost options, which can make it easier for more people to gain access to the internet. This would benefit a lot of people in developing countries as not only will they have a higher chance at having access to the internet, they will also learn that internet access is not too complicated to comprehend, and will learn the benefits of being online.

International organizations

Internet access can also be partly funded by different organizations which would lead to faster access to the internet for people in developing countries. In July 2010, the World Bank funded the Eastern Africa Submarine Cable System (EASSy), which cut the retail internet prices, making it easier for people to access the online world. Additionally, they can also provide technical experience and guidance to people in developing nations, as well as subsidization for distribution of technology and service plans, network plans and internet access.

Technology companies

Technology companies or even smaller startups can take initiatives in introducing new solutions to make the internet more accessible and low cost. Technology companies can collaborate with international organizations, governments, NGOs, etc in order to promote and subsidize internet access in LEDC. They could also use artificial intelligence to widespread internet access.

Timeline of Events

October 29, 1969	The first network to use Internet technology was Arpanet, which happened in 1969, known as the first computer connection between Stanford and UCLA.
1990s	The world is starting to adopt internet access, and many countries are actively using the Internet. However, developing countries do not have internet access due to limited infrastructure and resources.
2000s	Internet access started to spread in LEDCs, such as Brazil, India and parts of China.
2016	The United Nations Human Rights Council released a resolution which condemned intentional disruption of the Internet access by governments. This resolution emphasized the rights of people online.
2017	Communication companies such as OneWeb and SpaceX Starlink started projects to provide the world with internet coverage.
2020	The world was hit with the Covid-19 pandemic, which further showed the importance of the internet and digital access for education and the economy.

Possible Solutions

There are a few possible solutions to the issue of internet access in LEDC. Firstly, governments need to invest in the infrastructure of the country. For example, internet kiosks should be built in every rural LEDC, to ensure a form of internet access is possible within that specific radius. International organizations can also help fund these infrastructure developments, as well as perhaps any wireless technology and satellites that could help with the internet connection in that area. Governments or international organizations should also perhaps subsidize internet service plans for low income communities. Countries can collaborate with international organizations and governmental organizations to secure these fundings, as well as technical help and moderation for internet access.Additionally, companies and service providers should be offered incentives to promote affordable internet services to LEDCs. These developments could also be supported by community-owned networks which could reduce the costs of internet plans and internet access in general.

There could also be a distribution center which is funded by the United Nations, or other international organizations which provide and distribute free or very affordable devices and services to those who are unable to afford them. They could also hand out a few devices per community, which is not an ideal situation but gives people some internet access. These centers could also be training centers which train people in rural LEDC about digital safety, and digital skills so that people can use the internet effectively and make the most of their internet access. Additionally to this, there needs to be a form of moderation in order to ensure people in LEDC have data privacy and security regulations for their online activities.

Sources

References

7 connectivity solutions in Africa that made it to the final phase of Africa50 Innovation Challenge. (2020, August 3). Do4africa. https://www.do4africa.org/en/7-connectivity-solutions-in-africa-that-made-it-to-the-final-phase-of-africa50-innovation-challenge/

Craig, W. (2023, June 12). *The History of the Internet in a Nutshell (Timeline)*. WebFX. https://www.webfx.com/blog/web-design/the-history-of-the-internet-in-a-nutshell/#:~:text=1969%3A%20Arpanet

Gran, B. (2023, July 6). *OneWeb vs. Starlink: Comparing Satellite Internet Providers*. SatelliteInternet.com. https://www.satelliteinternet.com/resources/oneweb-vs-starlink/#:~:text=Starlink%20has%20a%20head%20start

How to access the internet in rural areas? | Konnect Africa. (n.d.). Africa.konnect.com. Retrieved September 1, 2023, from https://africa.konnect.com/en/satellite-internet-africa

Samad, B. E.-D., Mathias Herzog, and Rawia Abdel. (n.d.). *Why Are 4 Billion People without the Internet?* Strategy+Business. Retrieved September 1, 2023, from https://www.strategy-business.com/article/Why-Are-4-Billion-People-without-the-Internet

The internet as a human right. (n.d.). Brookings. Retrieved September 1, 2023, from https://www.brookings.edu/articles/the-internet-as-a-human-right/

These Countries Have the Highest Number of Individuals without Internet Access. (n.d.). https://www.digitalinformationworld.com/2020/08/these-countries-have-the-highest-number-of-individuals-without-internet-access.html

UN: Human Rights Council adopts resolution on human rights on the Internet. (2021, July 15). ARTICLE 19. https://www.article19.org/resources/un-human-rights-council-adopts-resolution-on-human-rights-on-the-internet/

What is Internet Kiosks | IGI Global. (n.d.). Www.igi-Global.com. Retrieved October 1, 2023, from https://www.igi-global.com/dictionary/internet-kiosks/33100