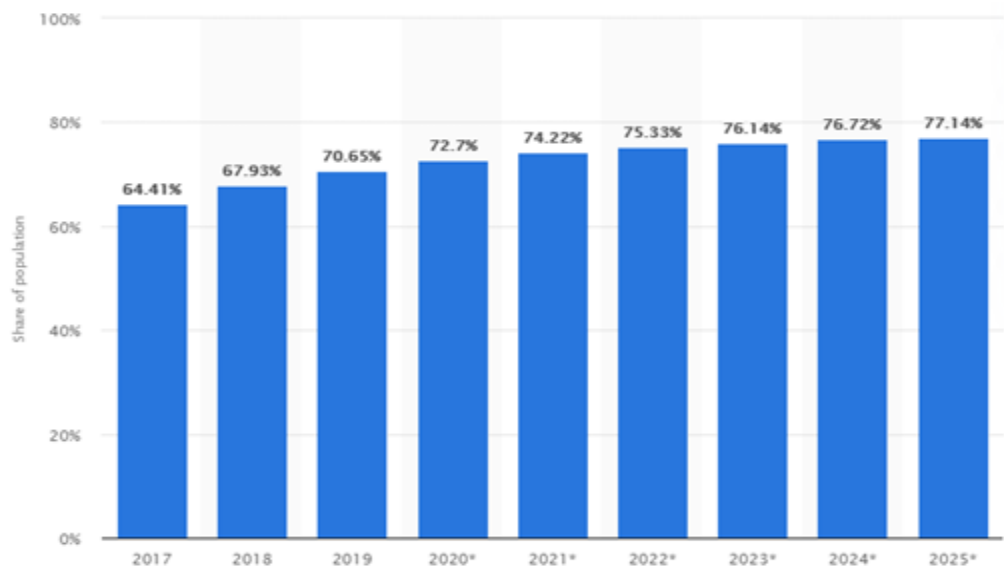


The Philippine Internet Situation

Population of Internet users in the Philippines from 2017 to 2019 with a forecast until 2025



According to the demographics illustrated and published by (Sanchez 2020), there is a total population of 70.7 in the percentage of Filipinos who are using the internet in 2019. This number is expected to be at 77.1 percent by 2025.

Philippines' Internet Performance by June 2020



Based on the Speedtest analysis that is shown from (Anon 2020), the Philippines ranked at 114 in mobile with a downloading speed of 16.17 Mbps, uploading speed of 5.91 Mbps, and a latency of 42 ms. As for fixed broadband, the Philippines ranked at 108 with a downloading speed of 23.74 Mbps, uploading speed of 23.46 Mbps and a latency of 32 ms.

According to the article of Icogo (2020), citing the study of TowerXChange and We are Social last 2019, there are 76 million internet users in the Philippines, and these users are connected to only 17,850 cell sites. Therefore, 4,258 people share a single cell site in the Philippines. In contrast, other countries in Asia have just fewer users per cell tower. There are a total of 150 million internet users in Indonesia, but they have over 96,000 towers. Therefore, only 1,500 people share one cell site. In Vietnam, with its 64 million Internet users, they have a total of 90,000 cell sites. Thus, they have an average of just about 711 users per cell site. China has around 19.6 million towers to cater users per site to a mere 408.

In the article of Business Inquirer (2018), they cited a study of TowerXchange. We Are Social last 2018, India has 462 million internet users with 1.459 million cell sites, thus having a user-per-site density of 316. It takes a minimum of 25 permits and eight months to create a single cell tower from negotiating and documenting prospective locations of cell towers to securing structural permits and approvals.



According to Ramos (2019), a study conducted by SWS in December 2018 showed that internet users in Luzon were at 56%, Visayas at 35%, and Mindanao at 32%. Furthermore, the internet user in urban areas was up by 8% from 54% to 62%, while it was only up by 6% from 31% to 37% in rural areas.

According to Khatri (2020), mobile networks in urban areas are more resilient than the rural areas in the Philippines. In his article about the effects of COVID-19 on the data consumption in the country, he reported that as a whole, 4G video experience had

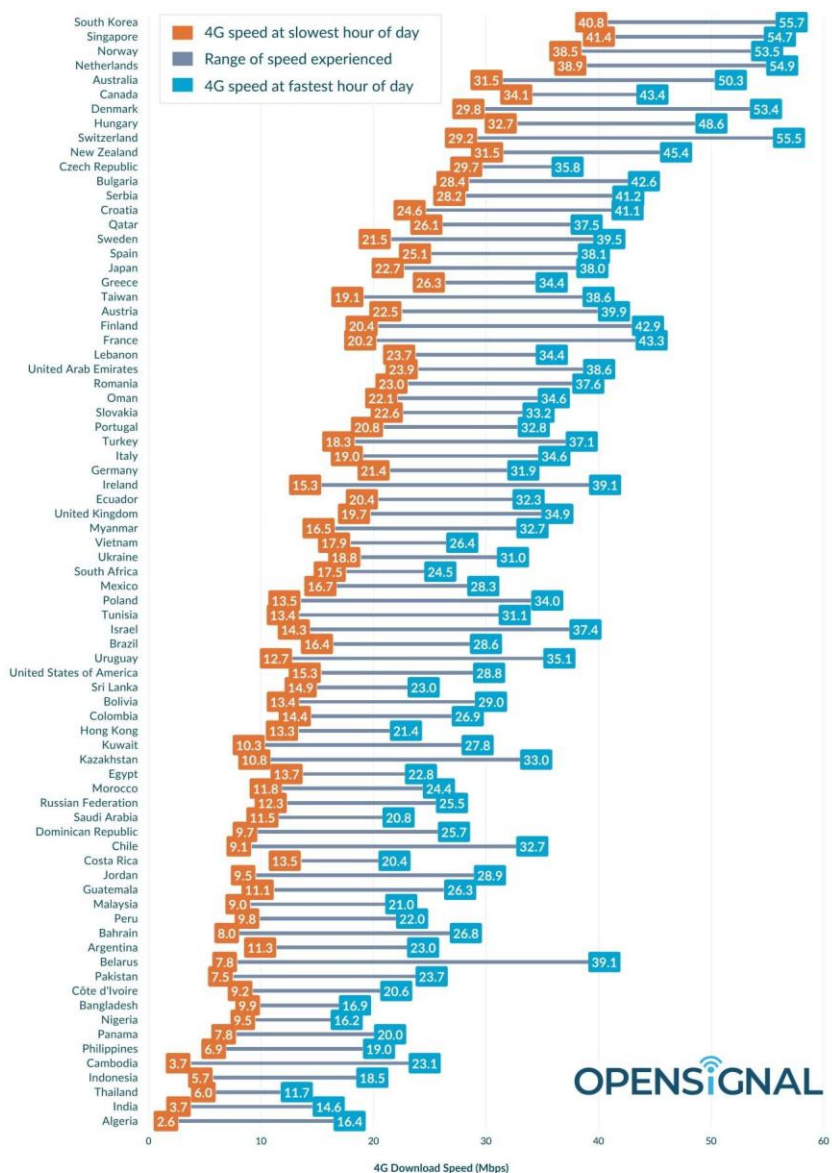
declined, likely due to the significant increase in people watching video streaming apps. However, while rural areas suffered a 7.5% to 21.2% decline in their video streaming experience, urban areas only suffered a 2.6% to 9.4% decrease in comparison.

In a report by Marek (2020), she goes over the incremental improvements that Filipino telecommunication companies had done with their mobile network over the past year. Both Smart and Globe had improved their scores across the board, with Globe coming up short or tying with Smart in all categories. In terms of video experience, Smart increased their score by 15.6% at 55.0, rated as Good, with Globe improving their score by 30.6%, coming up at 39.8, rated as Poor borderline Fair. For Games Experience, Smart and Globe scored 36.9 and 35.9 respectively, both rated at Very Poor. Smart won over Globe only barely with 64.8 beating Globe at 64.0, and both rated as very poor in Voice App Experience. For Download Speed Experience, Smart got a score of 10.6, while Globe only got 7.6. For Latency Experience, Globe and Smart are more or less tied at 60.7ms and 59.8ms, respectively. Lastly, for 4G availability, Smart achieved a country milestone of having at least 80% coverage with its 81.8% coverage, with Globe having a coverage score of 77.8%. While both companies had improved their offered services, they still do not hold up to what most developed markets provide.

According to the recent Speedtest Global Index (2020), with an average mobile download speed of 25.07 Megabits per second and an average fixed-line speed of 16.95 Megabits per second, the Philippines' average internet speed still falls below global averages (34.51 Megabits per second and 81.46 Megabits per second, respectively) despite improvements done to mobile networks and fixed lines. The Philippines also ranked 113rd among 138 tested countries in the mobile download speed while it ranked 109th among 174 countries.

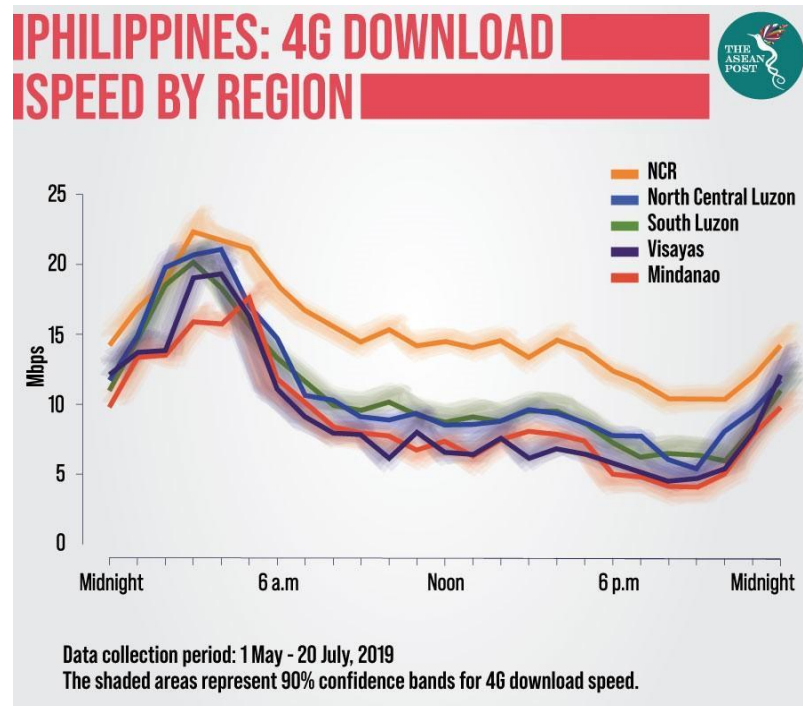
According to Terrazola (2020), Senator Grace Poe slammed the Philippines' poor internet quality compared to its ASEAN neighbors, citing the Speedtest Global Index with almost $\frac{1}{3}$ of the Filipino population having no access to the internet. She also expressed concern over this considering the current pandemic and the shift towards online education and work-from-home for Filipinos, making good internet connection quality even more crucial than ever. She also cited the high subscription prices of the telcos, which Filipinos cannot easily afford.

In a recent report, Opensignal analyzed fluctuations in 4G download speeds in 77 countries around the world, where the Philippines showed considerably significant variations, where speeds were found to be 2.8 times faster on the faster hour than on the slowest hour (Fitchard, Rizzato, & Fogg, 2019; Khidhir, 2019).



During the nighttime, all users over the Philippines experienced nearly the same speeds; however, more significant differences were noticed during the day. Users in the National Capital Region (NCR) were found to have the highest speeds during the busy times of the day. In general, the fastest speeds were observed from 3 am – 5 am, which start to decrease gradually for the rest of the day until they reach the lowest point in the evening and begin to increase again. There was a difference of 12 megabytes per second (Mbps) between the fastest and slowest speeds in the NCR, while 15.7 Mbps in North and Central Luzon. Most of the time, download speeds decrease as more people start using a network. Still, Opensignal indicates that there are apparent differences between

the connectivity speeds in different regions, where slowest speeds were observed in Visayas and Mindanao (Khidhir, 2019).



Source: Opensignal

According to The World Bank (2018), a third of the Philippines' poor population lives in Mindanao with only a quarter of the Philippines' total population. The Philippines Statistics Authority reports that every 3 out of 10 families in Eastern Visayas are poor. The availability of faster and consistent internet provides numerous opportunities to the users. Therefore, if Opensignal reports are to be followed, it appears that a better stream of opportunities is provided to those who are better off (Khidhir, 2019).

According to Sanchez (2020b), 73 million people in the Philippines use the internet as of January 2020, making up more than half of the country's total population. Most of the users are found to be 16 years old and above. Most internet users in the Philippines use mobile phones to access the internet, where a quarter of the total population used mobile phones in 2018. It is forecasted that it will reach up to half of the total population by 2023.

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