

Varun Chhetri - Task 2 Blog 1

[Varun Chhetri](#)

Blog 1: Global Internet Users (1980-2020)

Tool – Tableau

1.1 Dataset:

<https://www.kaggle.com/datasets/ashishraut64/internet-users>

1.2 Data Description:

The given dataset has 7 columns and 8868 rows.

Entity - Contains the name of the countries and the regions.

Code - Information about country code and where code has the value 'Region'; it denotes division by grouping various countries.

Year - Year from 1980-2020

Cellular Subscription - Mobile phone subscriptions per 100 people. This number can get over 100 when the average person has more than one subscription to a mobile service.

Internet Users(%) - The share of the population accessing the internet for all world countries.

No. of Internet Users - Number of people using the Internet in every country.

Broadband Subscription - The number of fixed broadband subscriptions per 100 people. This refers to fixed subscriptions to high-speed access to the public Internet (a TCP/IP connection) at downstream speeds equal to, or greater than, 256 kbit/s.

1.3 Data Cleaning and Preparation:

1. The data cleaning was performed in Excel. Some country names were misspelled and were replaced with the correct spelling. The missing values in the rows were replaced by zero.
2. Column 1 was not used, as it only contained details about the total number of columns. The country code was not required because the country name was already provided in the

previous column, which was sufficient for Tableau to interpret.

3. The rest of the data was clean and did not require further processing or transformation.

1.4 Data Story:

The development of the Internet began in the late 1960s as a project by the United States Department of Defence, which sort to create a system that could withstand a nuclear attack. From being primarily used for research work to being an integral part of modern life, transforming how we access information, communicate and conduct business. The Internet had a tremendous impact on society and will still continue to have in the future.

From the given dataset, we will compare how the Internet has grown over the years among the different countries and what key insights could be provided to Internet Service Providers to expand their reach and increase their users.

1.5 Data Visualisation and Analysis:

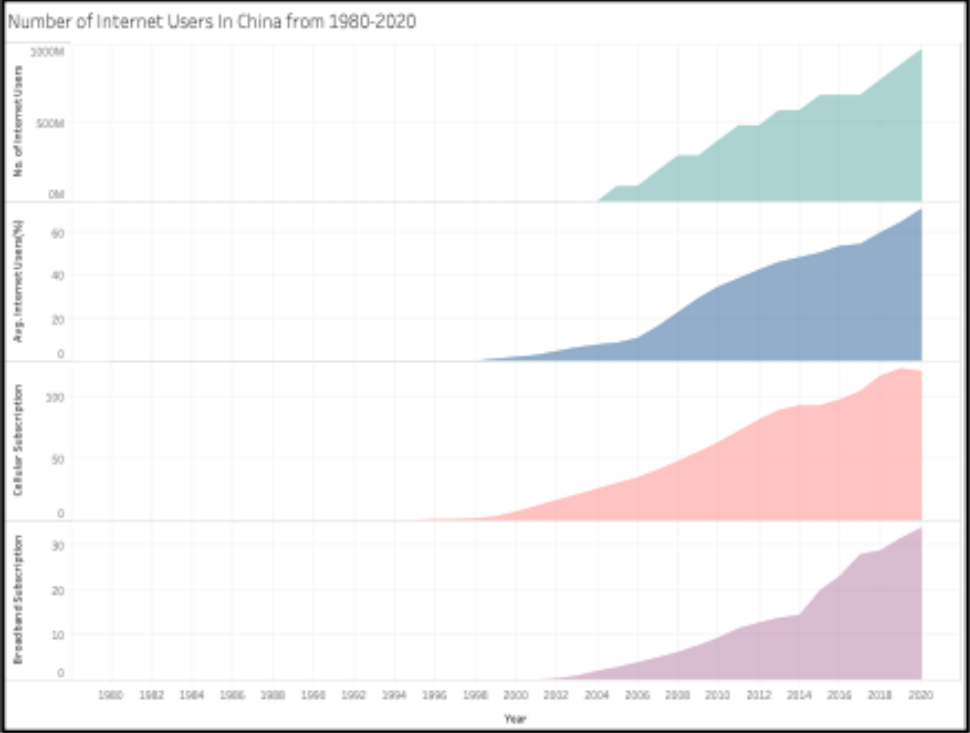
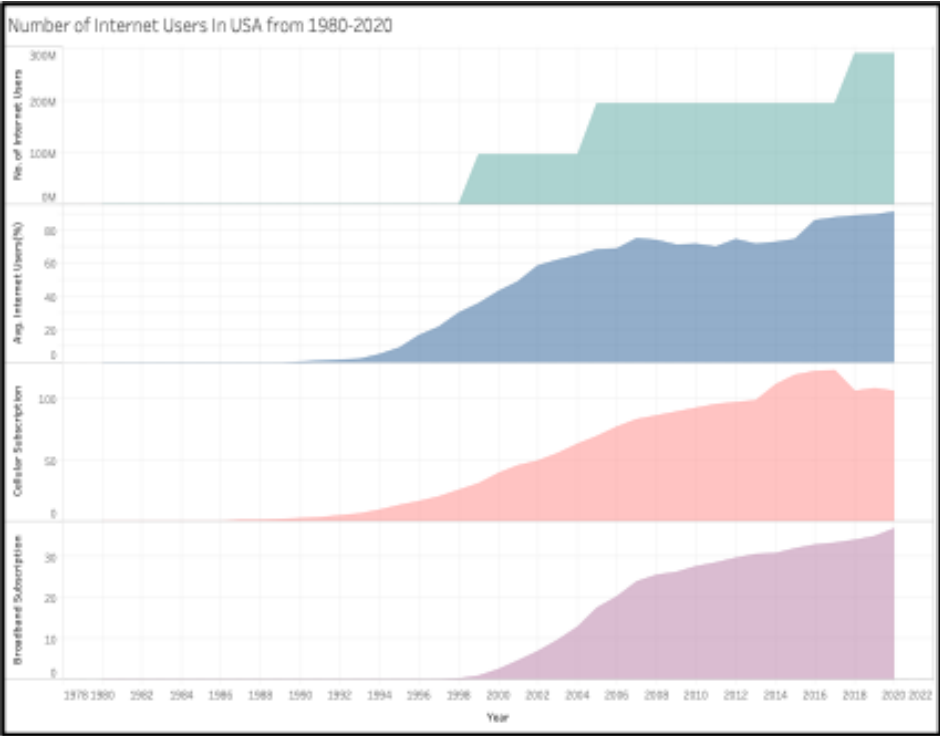


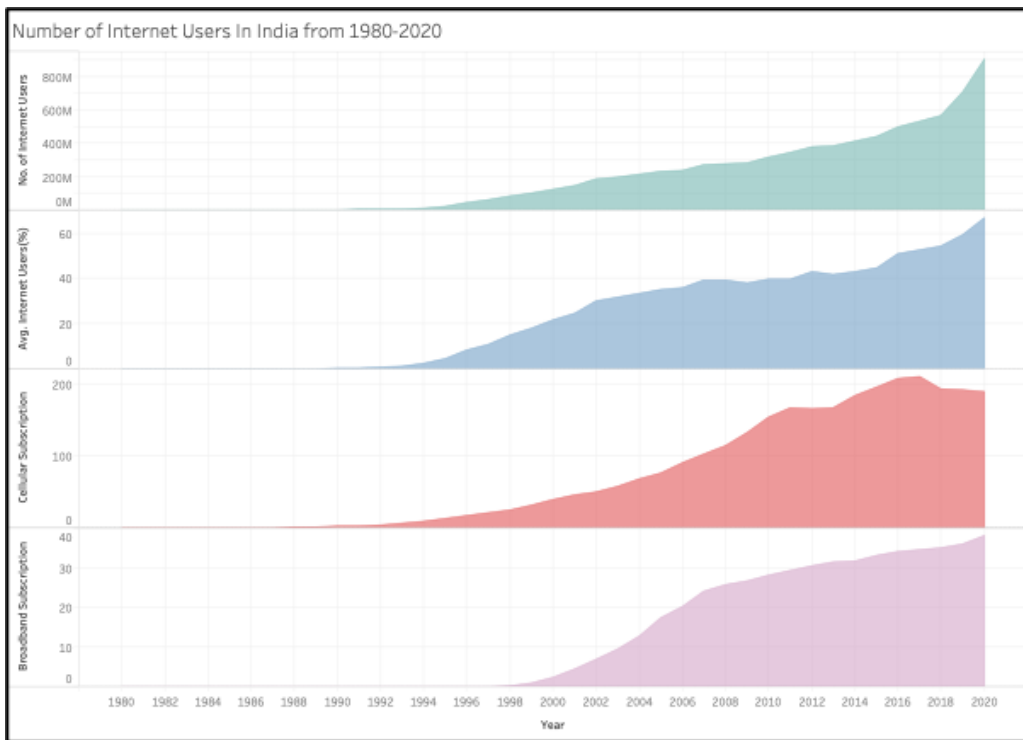
Fig 1.5.1: Comparison of Percentage of Internet Users in each country in 1990 and 2020

In 1990, very few countries had access to the Internet, with the USA having the most percentage of Internet users and followed by some European countries. None of the Asian and African countries had access to the Internet during that time. While in 2020, the scenario is quite different, with China having the greatest number of users followed by India and then the US. This shows us that during these 30 years, the internet demand has boomed.

The top 3 countries with the highest percentage of Users were:

1. China
2. India
3. USA

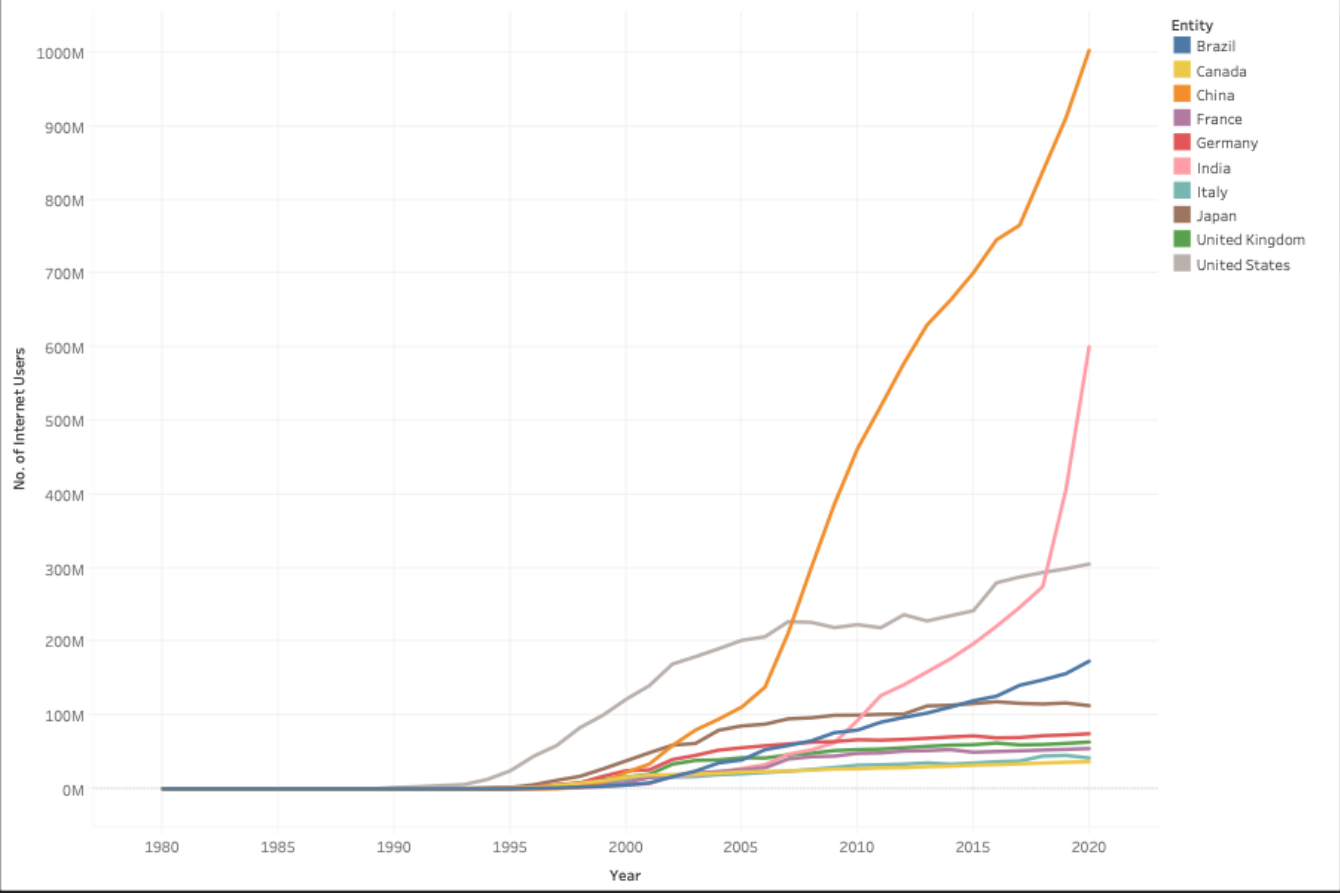




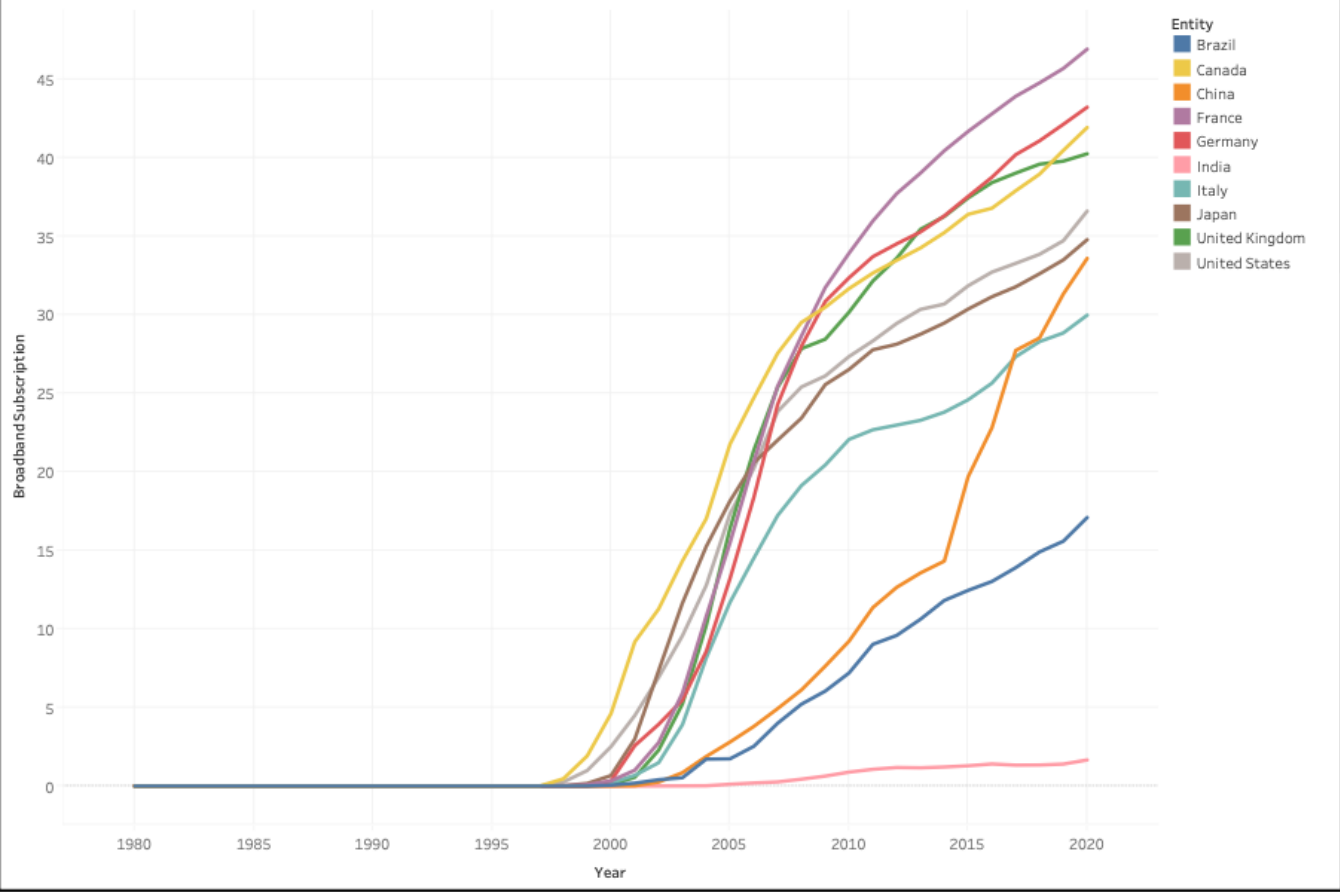
Comparison of the Number of Users, Cellular Subscription and Broadband Subscription in the top 3 countries.

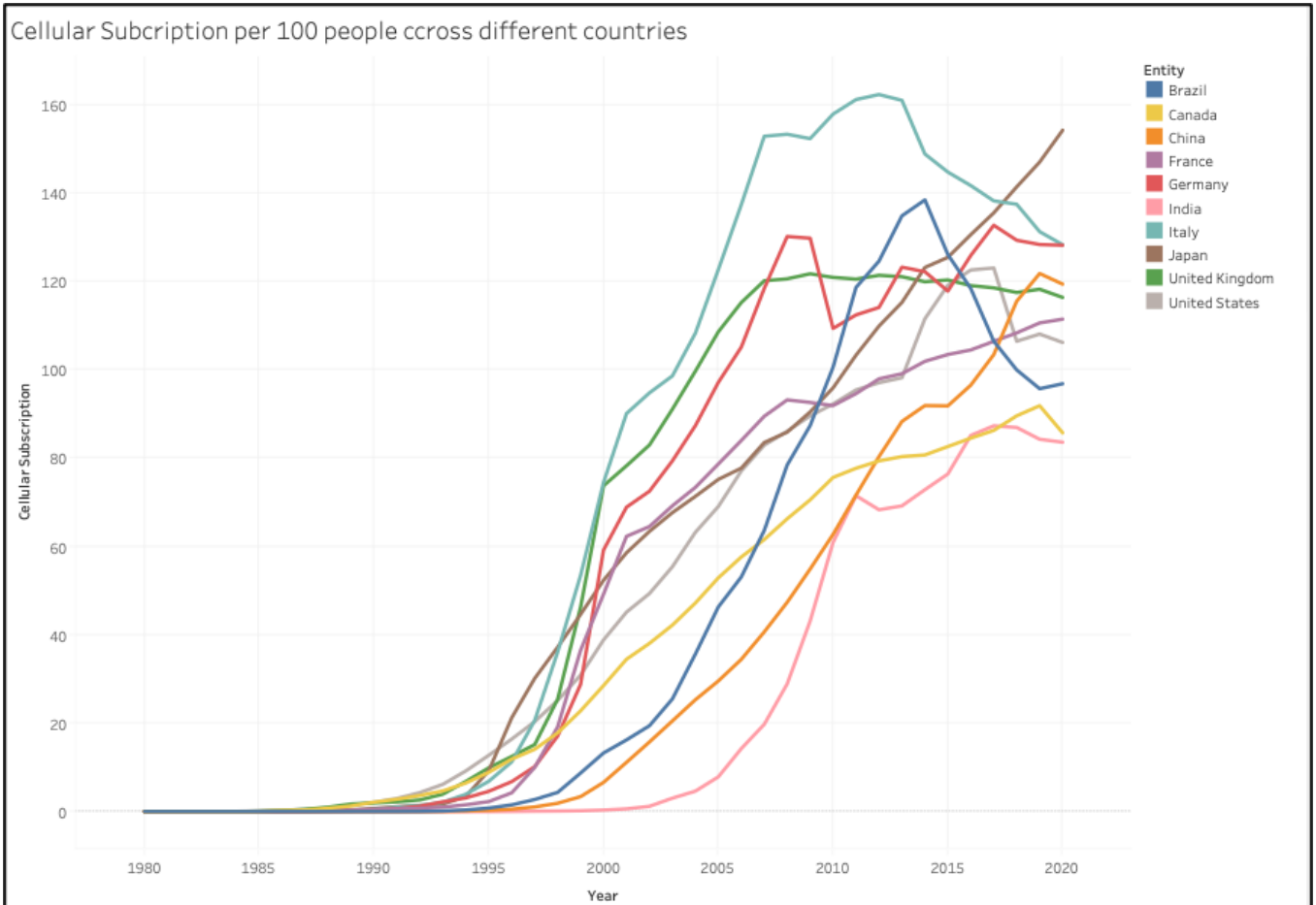
The comparison of the three graphs suggests that as the population grew, the demand grew. During 2000 – 2010, the rise in Users was exponential. The possible reasons could be the globalisation of computers and the launch of web browsers like google chrome, Internet Explorer, Yahoo, etc. At the same time, smartphones were also introduced, which used cellular data, providing internet at the fingertips. All these factors played an important role to help the Internet grow; similarly, broadband and cellular subscription had an increasing demand.

Comparing Number of Internet Users Across different Countries



Broadband Subscription per 100 people across different countries





We can compare countries with the highest Internet user, broadband subscriptions, and cellular subscriptions from the given visualisation. The visualisations suggest that each country has a different demand.

1.6 Conclusion:

The given data shows that the demand for the Internet has always been in the upward direction. The internet still has the potential to rise, as it does not cover the entire population. The countries that developed and provided better infrastructure to the Service providers helped grow the number of users, while the countries still not having proper infrastructure and governance had the potential to increase the number of users.

All three features, internet, broadband and cellular subscriptions, have a positive relationship with each other. This can mean that if the providers can provide a plan that covers all three segments, it can attract more customers.

1.7 References:

[1] IBM Corporation. (n.d.). *IBM100 - The Rise of the Internet*.
<https://www.ibm.com/ibm/history/ibm100/us/en/icons/internetrise/>

[2] Wikipedia contributors. (2023). History of the Internet. *Wikipedia*.

https://en.wikipedia.org/wiki/History_of_the_Internet

[3] EcomExperts. (2021). Brief history of the internet - rewind 25 years back. *EcomExperts*.

<https://ecomexperts.io/blogs/shopify-tutorial/history-of-internet>

Unread



✓ Subscribed