# ChannelYsis
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We took the data for the top 8 channels in each of 40 countries and tried to visualize the percentage of various aspects (comments, video count for channels, number of views, subscriptions, etc.) for different types of users (subscribers, sponsors/partners, musicians, comedians, gurus, etc.) by country. We used a normalized bar chart visualization to achieve the above. (E.g. Channel 'Views' for 'Comedian' user type for the US (and other countries) shown as a percentage of the whole (all channel views for the US).

**Constraints/Facts:**
1) Used data for only top 8 channels in each country (we wanted to use top 25, but each country had a different number for the topper list, 8 being the least. Hence we had to go with the baseline of 8 top channels)
2) Each channel is associated with only one unique User type
3) YouTube appears to use the terms 'user' and 'channel' interchangeably in the URLs.
4) YouTube provides data for only 40 countries. It does not cover every country in the world.

**History of work:**
1) Our original idea was to create a chloropleth map of the world to reflect the popularity/viewership of top 5 YouTube channels/videos in different countries.
   a. Our Plan was to assign 5 different colors to each of the 5 top channels/videos, and, on choosing the channel/video; the map would color the different countries in a gradient of that color, with darkest countries having highest popularity/viewership of that channel/video. This could be done for each of the top
   b. The problems with this idea:

   a) YouTube provides data for only 40 countries of the world. Hence it would not make for a very good visualization if most countries were blank. It could also be misunderstood to mean

lowest popularity/viewership in those countries.

b) We thought of applying the same concept to a smaller region, like the United States alone, but it turns out that only content (channel) owners are allowed to view geographical distribution of data for regions within a country.

2) Our second idea was to use pie charts to show distributions of channels by user types as a percentage of the whole (all channels) for a particular country, and repeat the same for all countries.

   a. The problems with this idea:
      i. Doing this for all (or multiple) countries with the aim of comparing the distributions of channels by user type was not a good idea as pie charts are least effective for percentage comparisons.
      ii. This was neither too challenging, nor too meaningful as visualization.

3) Finally, finding the right APIs that would work for us, to help achieve what we wanted to show was a challenge as they have a very restricted set of APIs.