



Pandemics: Data Evolution and Visualization



From

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Disclaimer

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The data used for the creation of the visualizations are taken from WHO and IMF sites.



Agenda

- // Pandemic
- // Data evolution
- // Evolution of analytics
- // Heat maps
- // COVID impact on GDP of various countries
- // Effect on unemployment rate in various countries

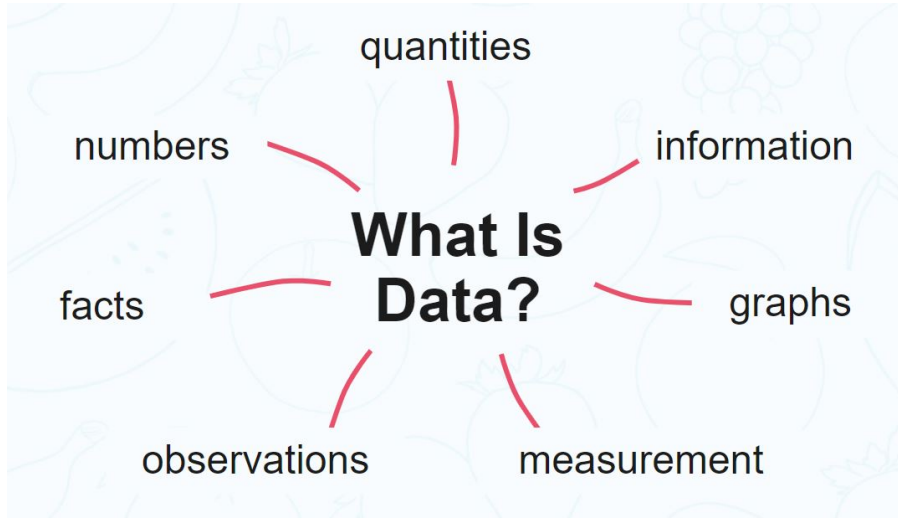


Pandemics

An outbreak of infection due to bacterium or virus which is capable of spreading rapidly and widely



Data & its Evolution



1790

Door to Door



1960

Paper surveys



1970

Telephone surveys



2000

Internet / Calling
mobile phones



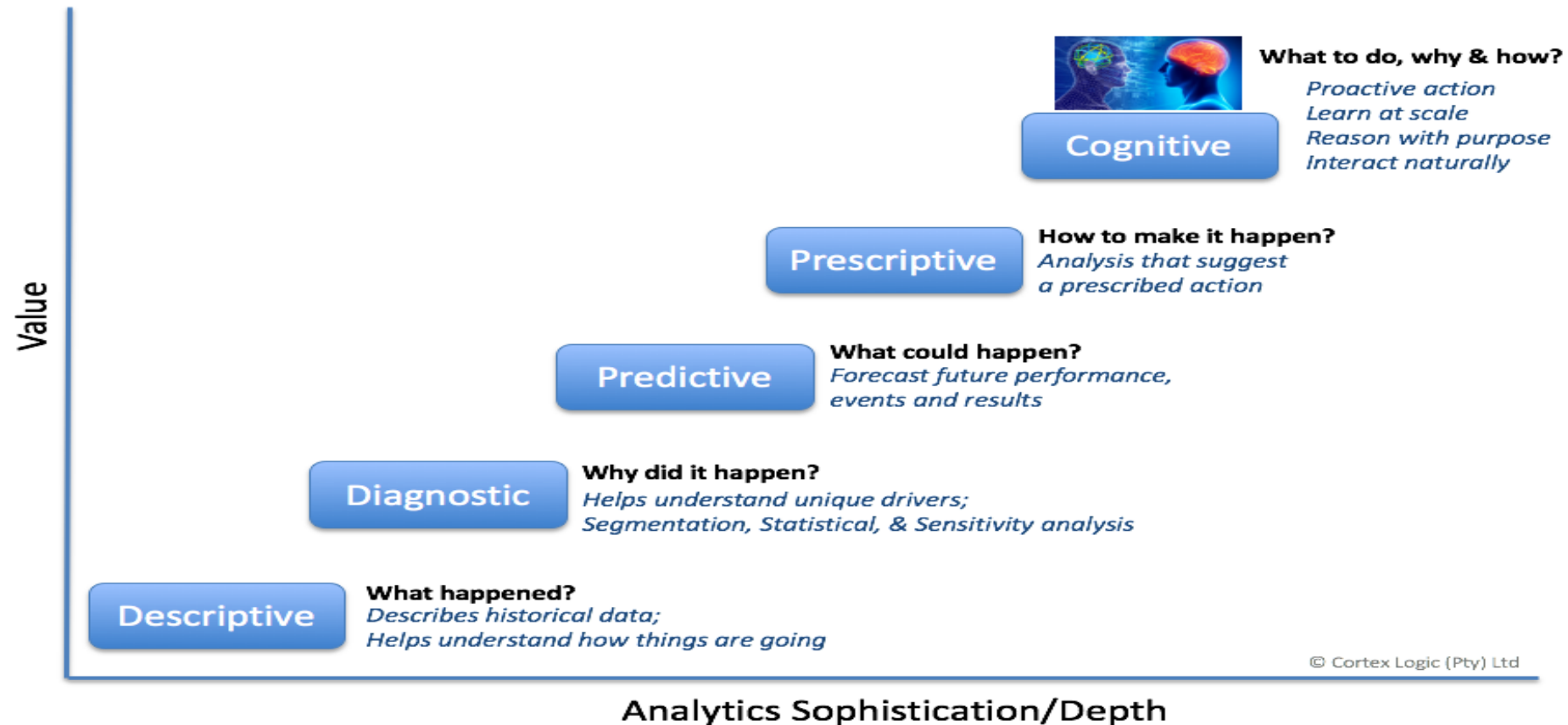
2016

Satellites, sensors,
drones, mobile data
collection



Data Analysis

Data analysis is a process that begins with retrieving data from various sources and then analyzing it with the goal of discovering beneficial information.



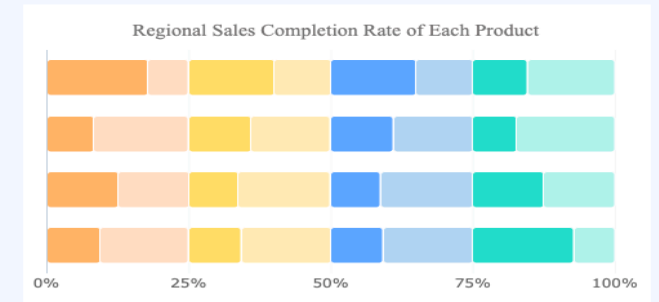
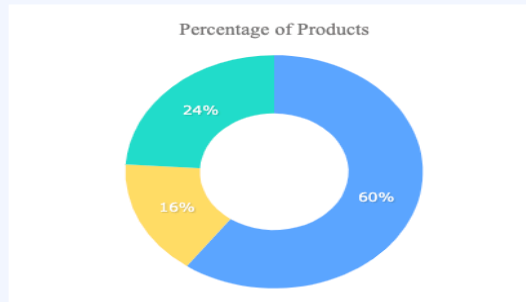
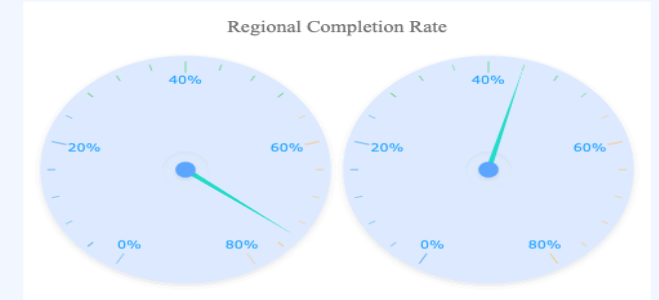
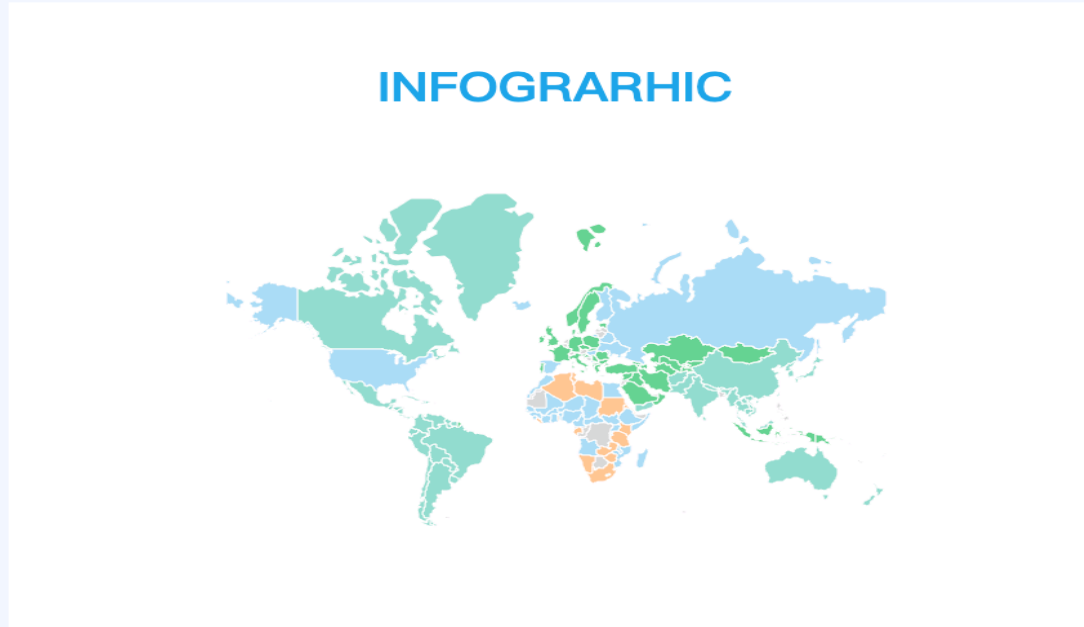
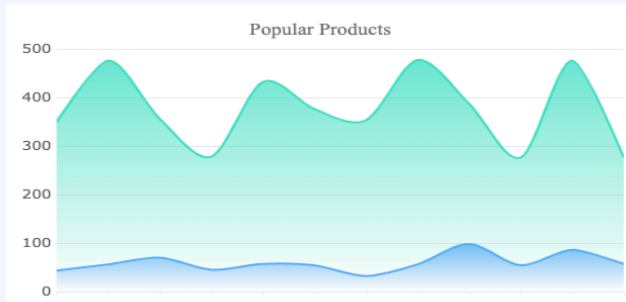
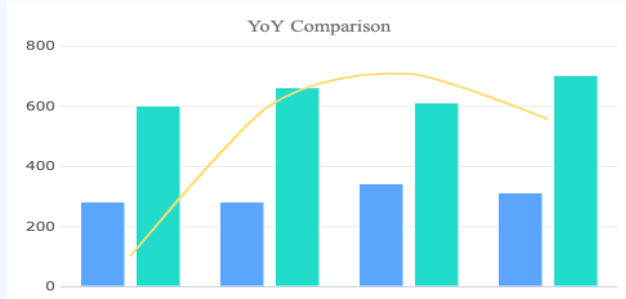
Analytical Tools





Data Visualization

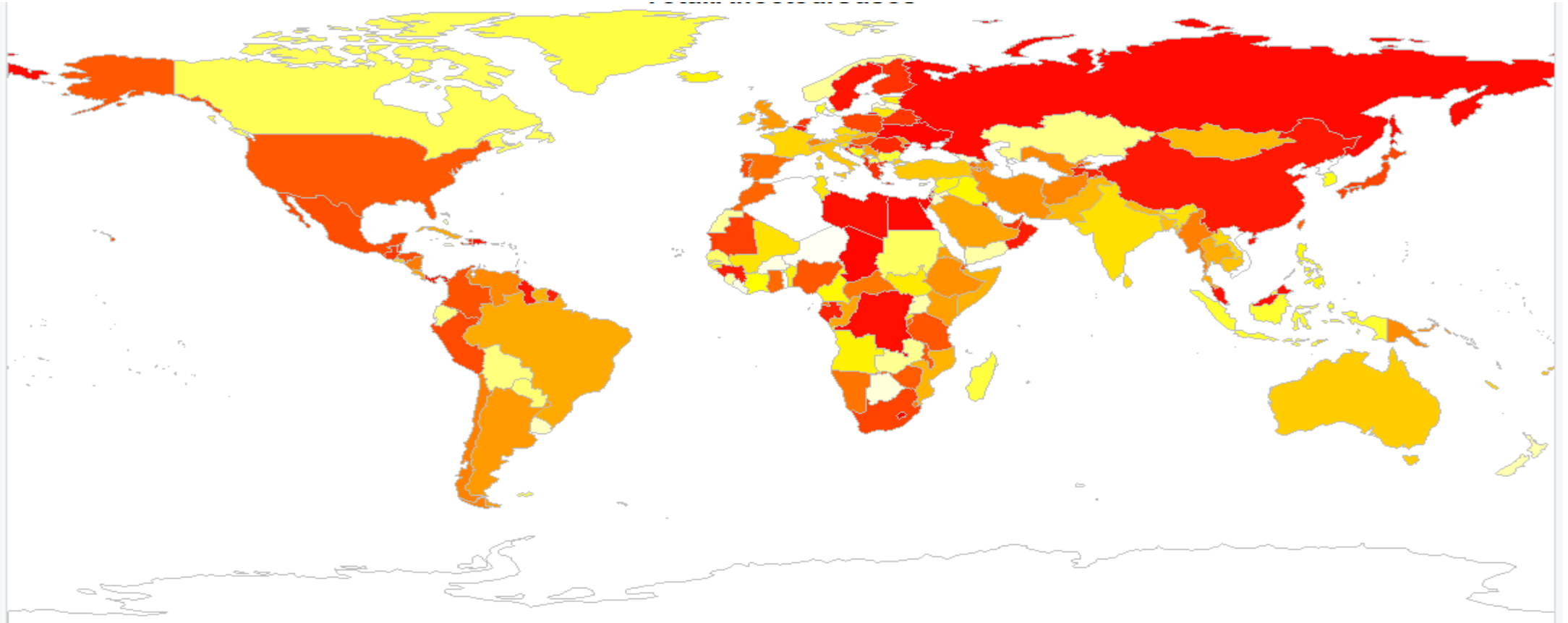
refers to the techniques used to communicate data or information by encoding it as visual objects (e.g., points, lines or bars) contained in graphics



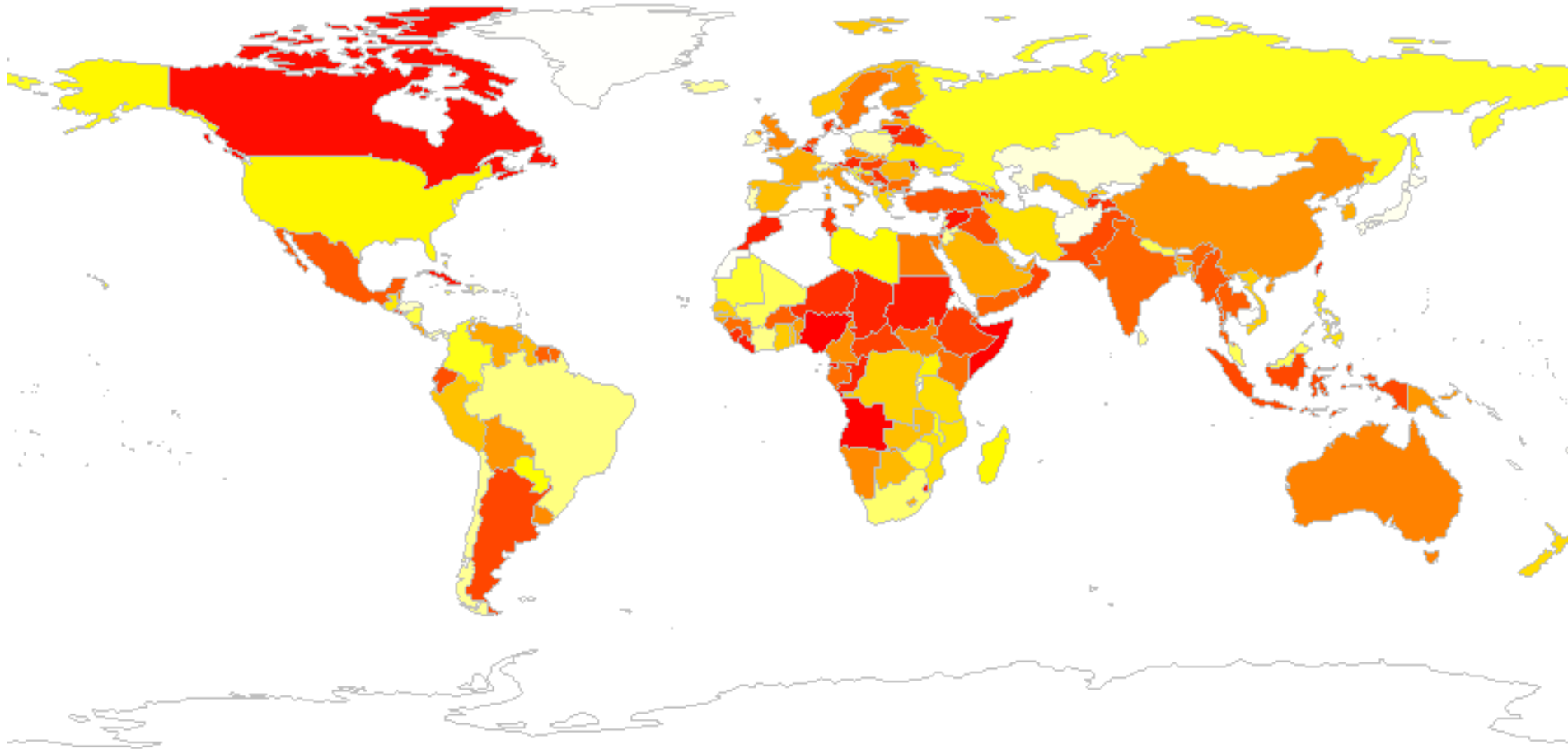
HEAT MAPS

Heat Maps is to better visualize the volume of locations/events and assist in directing our attention towards areas on data visualizations that matter most. So we have tried to visualize the causalities of the COVID pandemic.

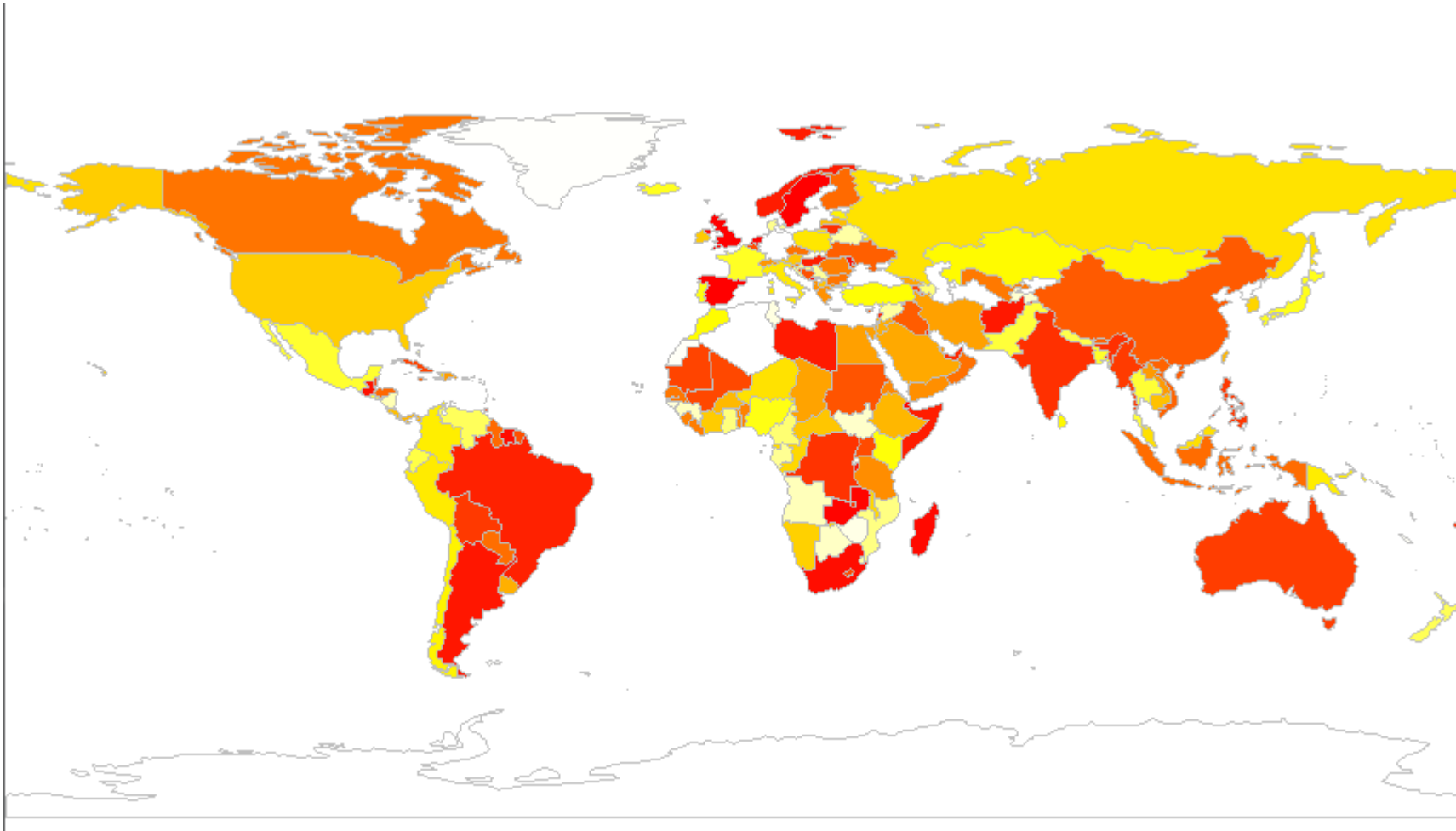
Total number of affected cases



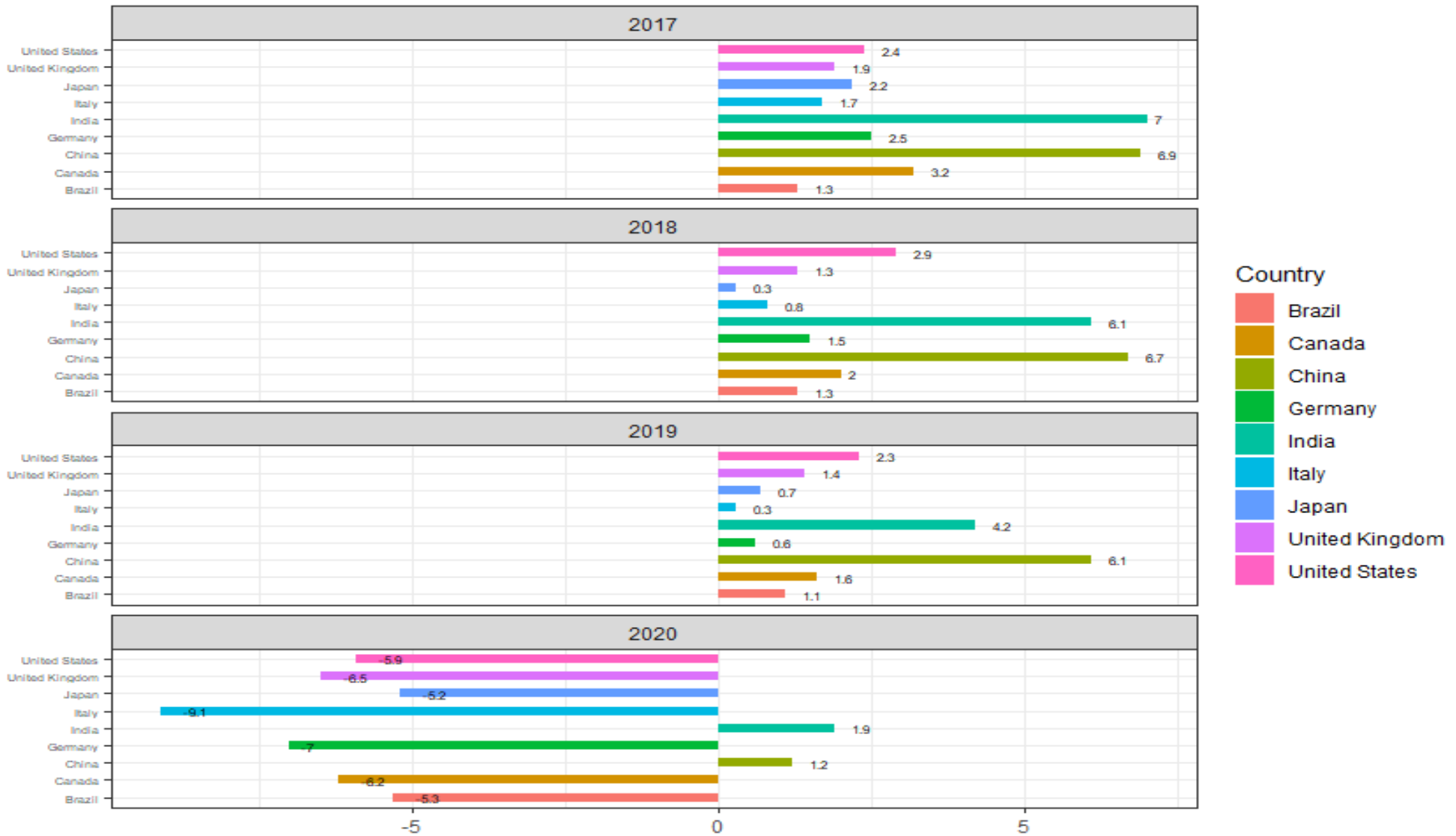
Total number of deaths

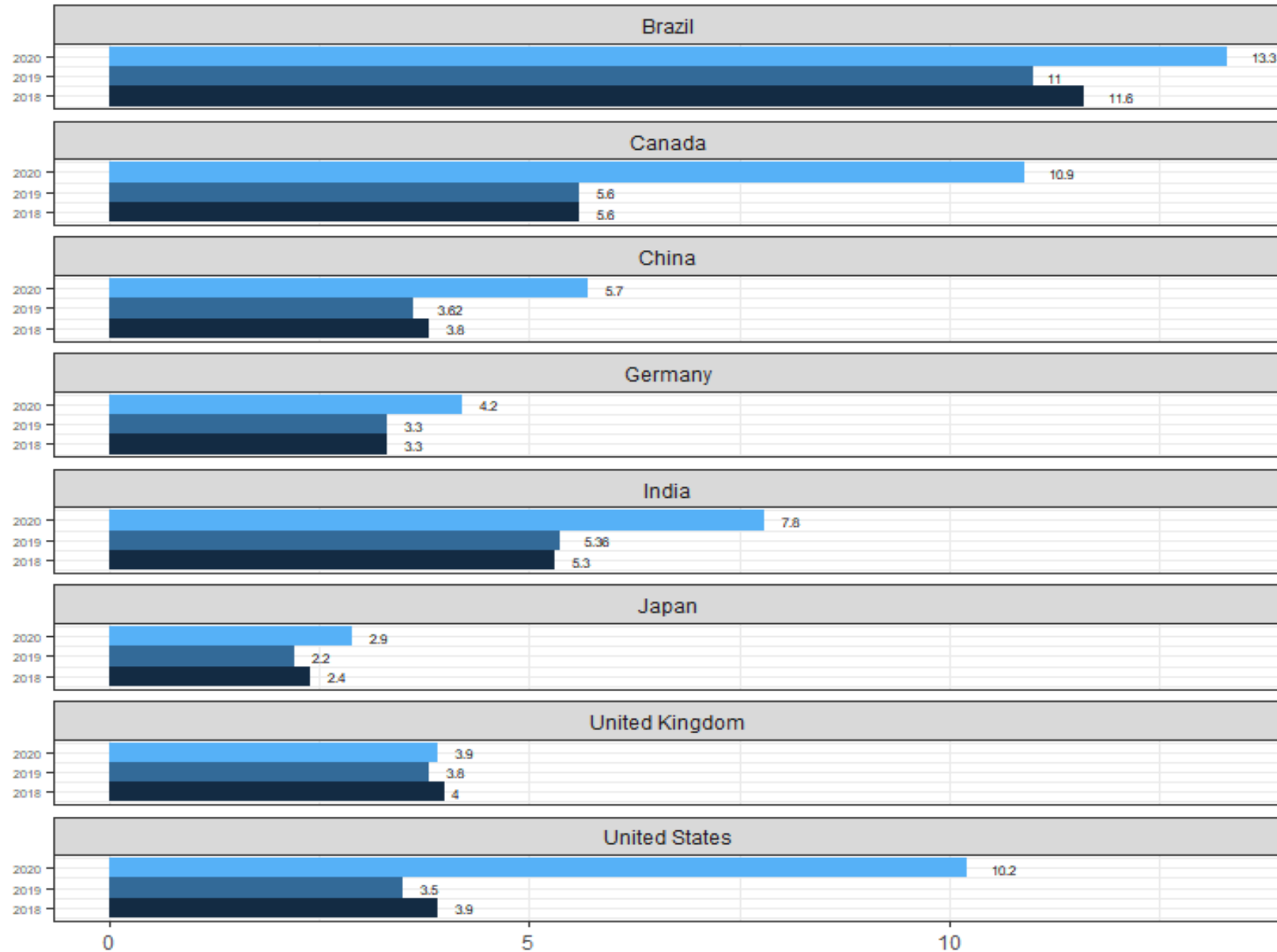


Total number of Active cases



GDP Growth rate (Annual percent change)





**Unemployment rate
Of various countries
through years**



References

- <https://www.visualcapitalist.com/history-of-pandemics-deadliest/>
- <https://www.gutcheckit.com/blog/a-history-of-data/>
- <https://dx.doi.org/10.1098/rstb.2018.0276>
- <https://www.imf.org>
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Thank you!



Bye-Bye

