**Name:** Senny  Huang                       **Date:** 11/11/2021

**Lab section:** Thursday

**Show your work!!!**

**Acquire**

Week:  12

Date:    April 9th                          Year: **2021**                          Data:
https://data.world/makeovermonday/2021w19

**Source Article/Visualization:**

What Does 1GB of Mobile Data Cost in Every Country?
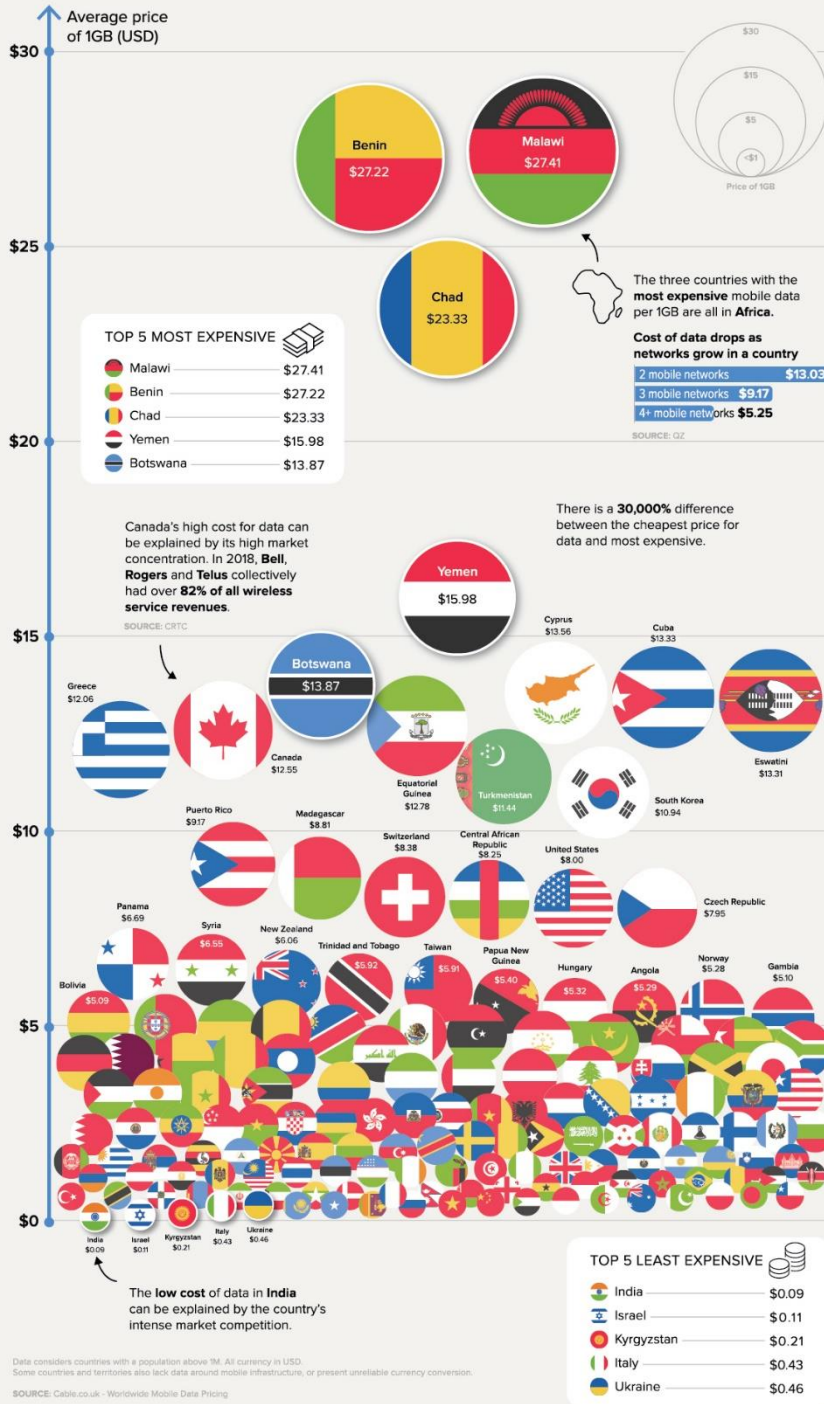
Data Source: Visual Capitalist


**Represent**

THE COST OF
# 1GB of Mobile Data in Every Country

**THERE ARE MORE MOBILE PHONE** subscriptions in the world right now than there are human beings.

Despite cell phone use becoming prevalent worldwide, the cost of data still varies greatly from country to country. Here's a look at the average cost of 1 GB of data across the globe.

Average price of 1GB (USD)



$30
$15
$5
<$1
Price of 1GB

$30

Benin
$27.22

Malawi
$27.41

$25

Chad
$23.33

The three countries with the **most expensive** mobile data per 1GB are all in **Africa**.

**Cost of data drops as networks grow in a country**

| 2 mobile networks | $13.03 |
| 3 mobile networks | $9.17 |
| 4+ mobile networks | $5.25 |

SOURCE: GZ

**TOP 5 MOST EXPENSIVE**

| Malawi | $27.41 |
| Benin | $27.22 |
| Chad | $23.33 |
| Yemen | $15.98 |
| Botswana | $13.87 |

$20

There is a **30,000%** difference between the cheapest price for data and most expensive.

Canada's high cost for data can be explained by its high market concentration. In 2018, **Bell, Rogers** and **Telus** collectively had over **82%** of all wireless service revenues.
SOURCE: CRTC

Yemen
$15.98

Cyprus
$13.56

Cuba
$13.33

$15

Greece
$12.06

Botswana
$13.87

Canada
$12.55

Equatorial Guinea
$12.78

Turkmenistan
$11.44

Eswatini
$13.31

South Korea
$10.94

Puerto Rico
$9.17

Madagascar
$8.81

Switzerland
$8.38

Central African Republic
$8.25

United States
$8.00

$10

Panama
$6.69

Syria
$6.55

New Zealand
$6.06

Trinidad and Tobago
$5.92

Taiwan
$5.91

Papua New Guinea
$5.40

Hungary
$5.32

Angola
$5.29

Norway
$5.28

Gambia
$5.10

Czech Republic
$7.95

Bolivia
$5.09

$5

India
$0.09

Israel
$0.11

Kyrgyzstan
$0.21

Italy
$0.43

Ukraine
$0.46

$0

The **low cost** of data in India can be explained by the country's intense market competition.

**TOP 5 LEAST EXPENSIVE**

| India | $0.09 |
| Israel | $0.11 |
| Kyrgyzstan | $0.21 |
| Italy | $0.43 |
| Ukraine | $0.46 |

Data considers countries with a population above 1M. All currency in USD.
Some countries and territories also lack data around mobile infrastructure, or present unreliable currency conversion.

SOURCE: Cable.co.uk - Worldwide Mobile Data Pricing

**VISUAL CAPITALIST**

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**Critique**

The things I like about this visualization include the colors they used, the font choice, and the different labels they had throughout the visual. What I don't like as much however is most likely how the flags become very clumped together and hard to read towards the bottom of the visual.

The category that this visualization falls in is category of data map on the visualization periodic table. It is a overview visualization as it has more visuals than it does numbers in some parts. It is divergent thinking as it mostly complicated and the graphic could easily be simplified.

**Mine**

What is the cost of data in European countries?

**Filter**

| # Sheet1 Rank | ⊕ Sheet1 Country ⌵ ⯊ | # Sheet1 Avg Price of 1... |
|---|---|---|
| 1 | India | 0.0900 |
| 2 | Israel | 0.1100 |
| 3 | Kyrgyzstan | 0.2100 |
| 4 | Italy | 0.4300 |
| 5 | Ukraine | 0.4600 |
| 6 | Kazakhstan | 0.4600 |
| 7 | Somalia | 0.5000 |
| 8 | Sri Lanka | 0.5100 |
| 9 | Russian Federati... | 0.5200 |
| 10 | Vietnam | 0.5700 |
| 11 | China | 0.6100 |

**Stakeholders**

My audience could be anyone who lives in Europe or anyone who is interested in the data prices in Europe. The assumptions that I made were the person knows what mobile data is, and I also assumed that they know where Europe is. Since the data is in USD, I also assume they used USD as their primary currency source. The visualization software I used was Tableau.
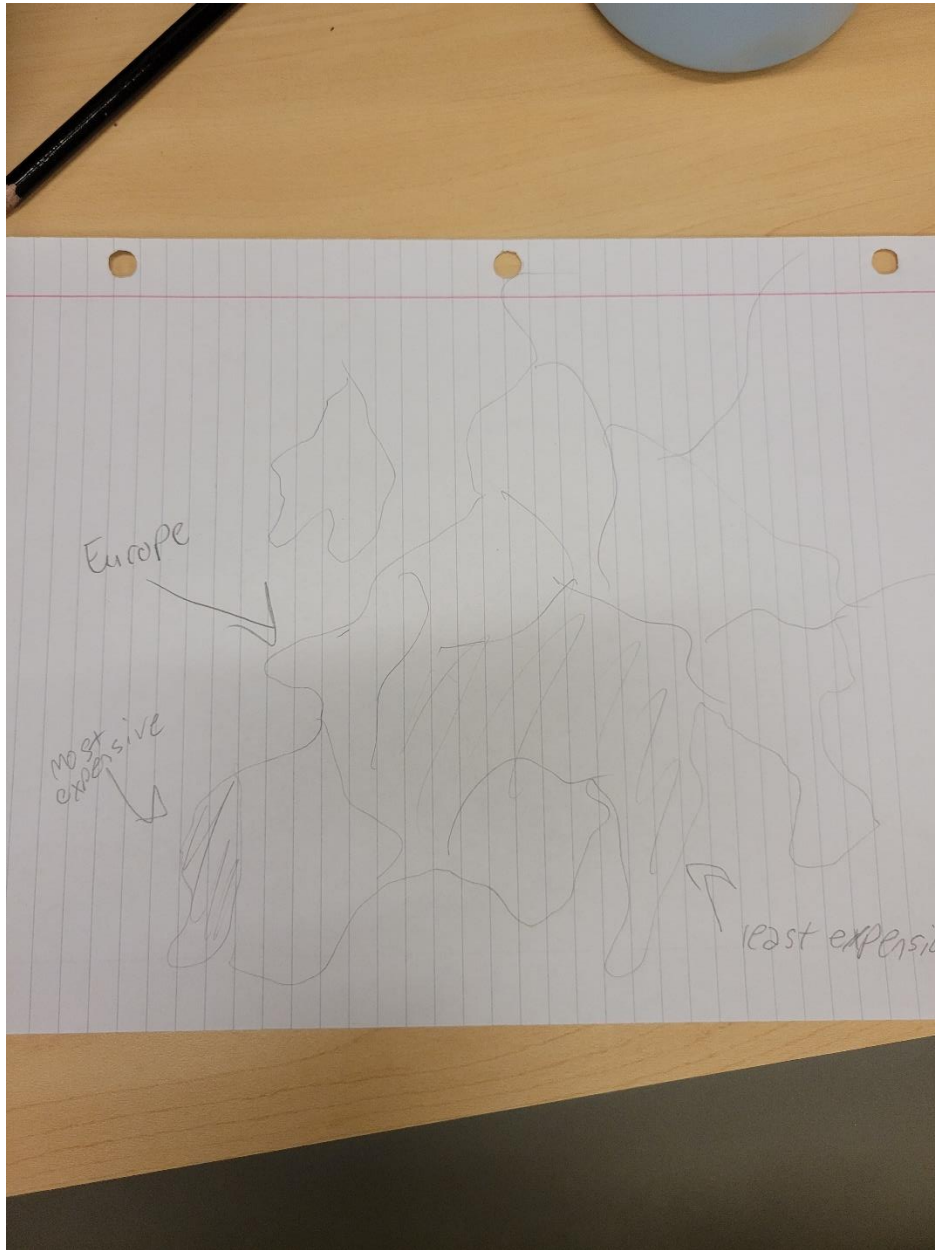
**What to submit:** This document in PDF format only (if you do not know how to do this, ask).

**Choose the best layout** for your makeover visualization: Portrait or Landscape, Remove the page of the layout that you DO NOT choose. No blank pages!

**NEW** <u>Sketch your Makeover</u>

In the space below, sketch out your ideas for refined visualization. You must use pen/pencil and paper to sketch out your idea, then take a photo of your sketch and include it in the space below.
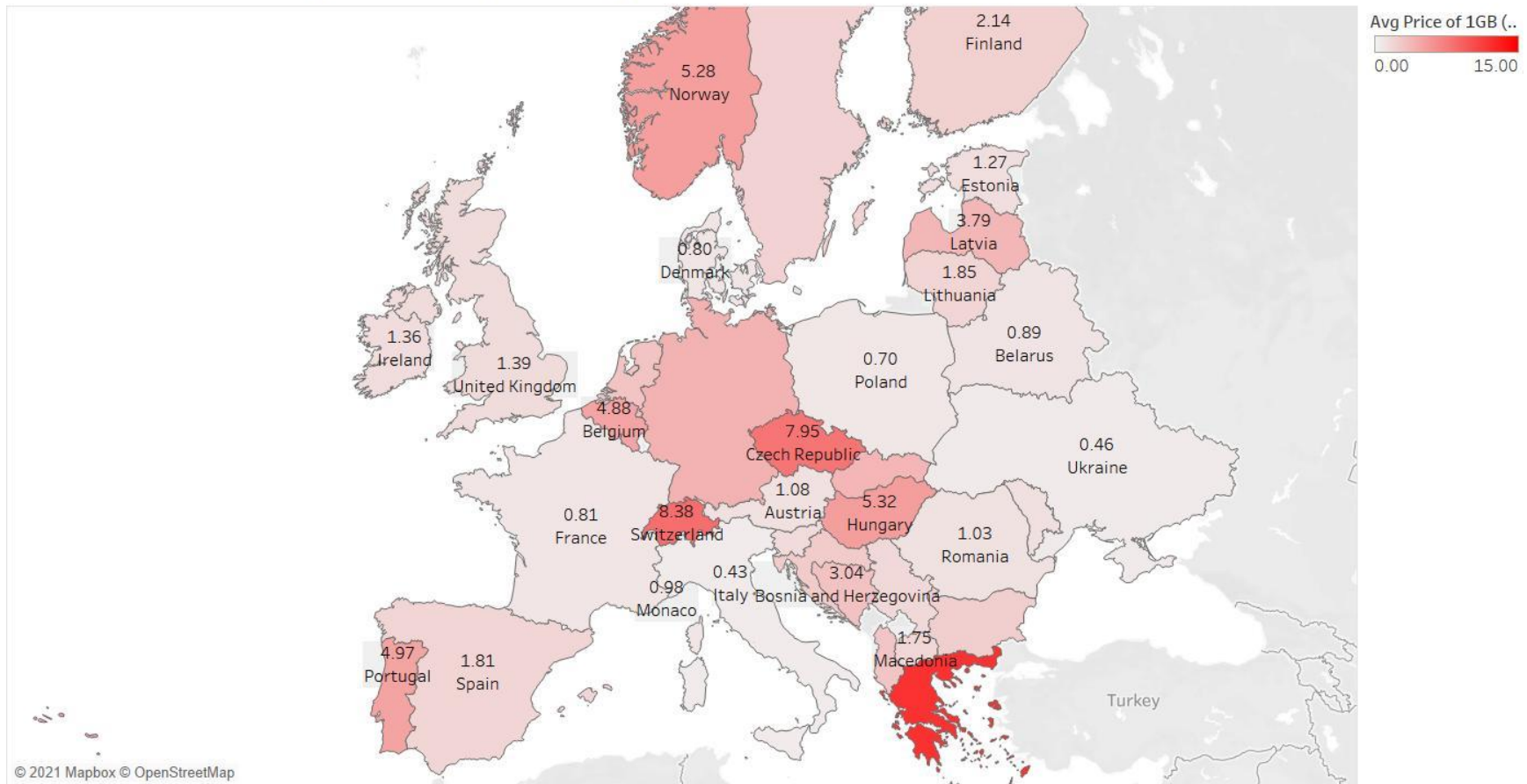
**Refine (Makeover – Landscape view)**

Use an additional page if necessary. Remember, the purpose of visualization is "insight." Take and include a screenshot of your visualization and include it below. Use Data Visualization Best Practices (see data visualization checklist). <mark>You MUST use more advanced chart types for your makeover.</mark> **Chart types that are not allowed: bar (single or stacked), pie, line charts, scatter plots, no tables.**

The Cost of Data in European Countries (in USD)



Map based on Longitude (generated) and Latitude (generated). Color shows sum of Avg Price of 1GB (USD). The marks are labeled by sum of Avg Price of 1GB (USD) and Country. Details are shown for Country. The view is filtered on Country, which keeps 35 of 155 members.

**Resources**
Data Visualization Checklist:
http://stephanieevergreen.com/wp-content/uploads/2016/10/DataVizChecklist_May2016.pdf

How to give constructive criticism:
https://personalexcellence.co/blog/constructive-criticism/

Sample Makeovers
https://www.makeovermonday.co.uk/gallery/

**Grading Rubric**

| Excellent (11-15 pts) | Good (6 -10 pts) | Fair (2-5 pts) | Needs Improvement (0 - 1 pt) |
|---|---|---|---|
| Meets **ALL** or most of these: Makeover is esthetically pleasing (color, perception), best practices followed (insightful), Correct dataset downloaded; provided an interesting point of view of the data; critiqued previous makeover, critique is constructive (indicates one thing that is done well, and one thing that could be done differently, what will be done to improve the visualization), assumptions (more than one) are listed. | Meets **MOST** of these: Makeover is esthetically pleasing (color, perception), best practices followed (insightful), Correct dataset downloaded; provided an interesting point of view of the data; critiqued previous makeover, critique is constructive (indicates one thing that is done well, and one thing that could be done differently, what will be done to improve the visualization), assumptions (more than one) are listed. | Consistently meets **SOME** of these: Makeover is esthetically pleasing (color, perception), best practices followed (insightful), Correct dataset downloaded; provided an interesting point of view of the data; critiqued previous makeover, critique is constructive (indicates one thing that is done well, and one thing that could be done differently, what will be done to improve the visualization), assumptions (more than one) are listed. | Little to no evidence of the understanding of the data visualization process. Lackluster makeover or no makeover. Little effort. |
| Sketch included: hand drawn [5 pts] | Sketch included, but was generated by computer [2 pts] | No sketch included. [0 pts] | |
| More advanced chart types used [5 pts] | More advanced chart types used, followed most best practices [3 pts] | Basic chat types used in the makeover [2 pts] | Little to no improvement in visual representation of the data [0 pts] |