Module One: Visualization Foundations

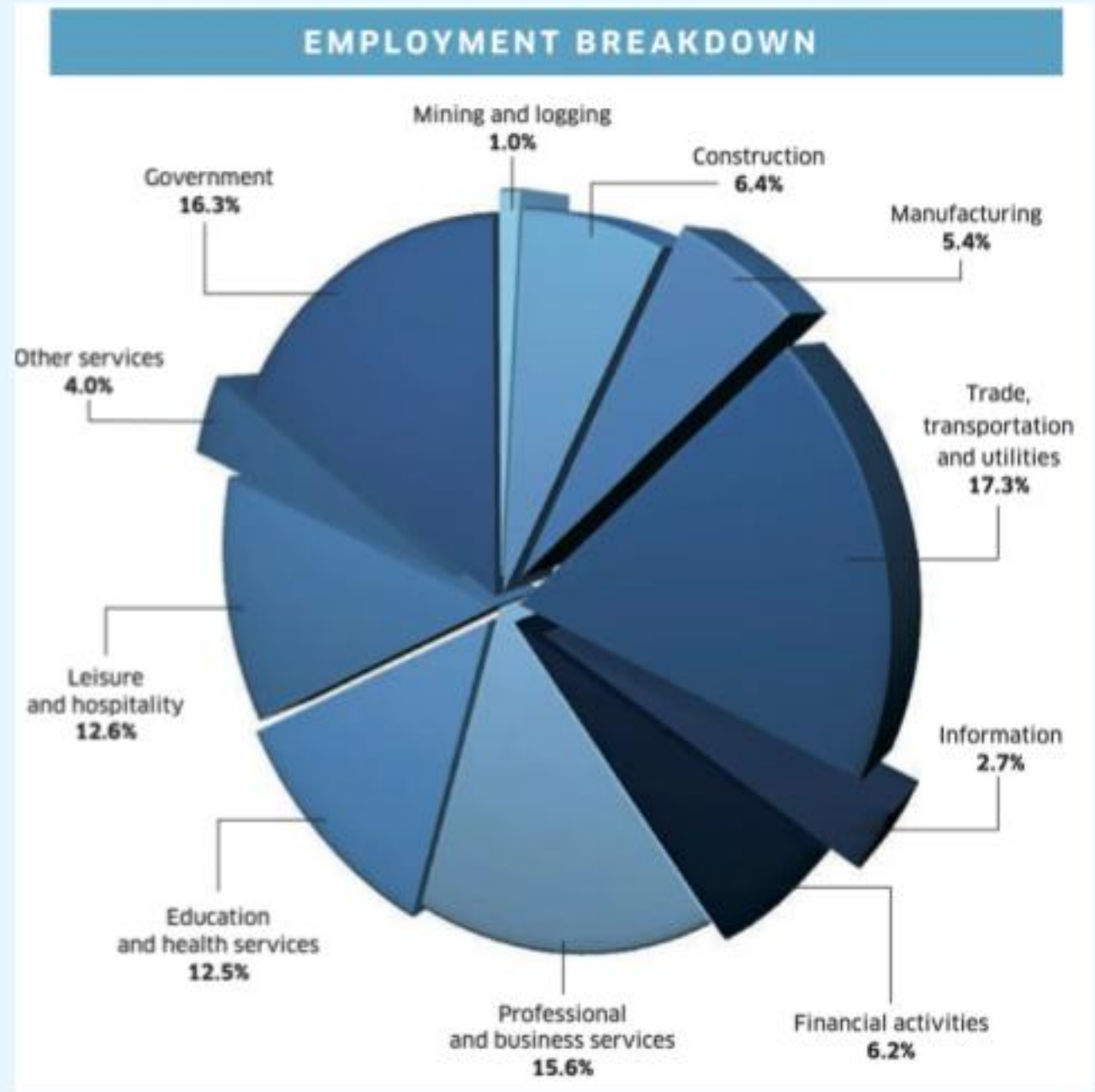**Meghan O'Malley**
2/12/2021

Slide One: The Original

The original source: Page 3 of
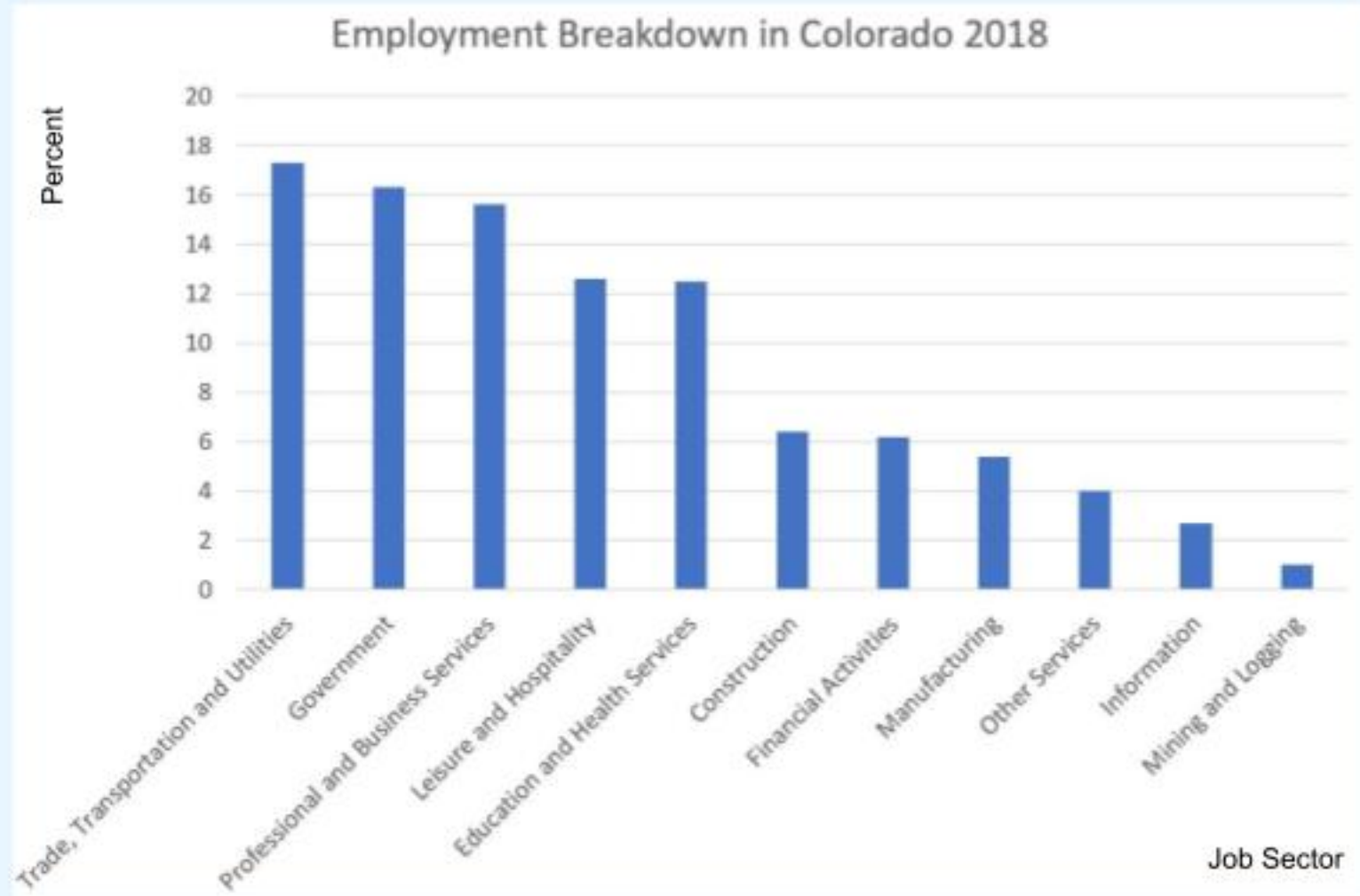Dossier (ink-live.com)

Description: The data is trying to show the job diversity in the state of Colorado in 2018 in a magazine. The goal is to represent the diverse economy.

Misleading: The 3D pie chart may cause it to be misleading because of the perspective. Some of the wedges are touching while others are not. Also, it's hard to rank the categories from highest to lowest because the percentages are all over the place. Specifically people may mistake the sizes and importance of each wedge.

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EMPLOYMENT BREAKDOWN

- Mining and logging 1.0%
- Construction 6.4%
- Manufacturing 5.4%
- Government 16.3%
- Other services 4.0%
- Trade, transportation and utilities 17.3%
- Leisure and hospitality 12.6%
- Information 2.7%
- Education and health services 12.5%
- Professional and business services 15.6%
- Financial activities 6.2%

Slide Two: The Redesign

Explanation: My redesign changes the visual to a bar chart. It's easier to breakdown and interpret the data. At first glance it's easy to determine what job sectors have the highest and lowest percentages of employment in Colorado.

Employment Breakdown in Colorado 2018

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Slide One: The Original

The Original Source: Misleading Graphs: Figures
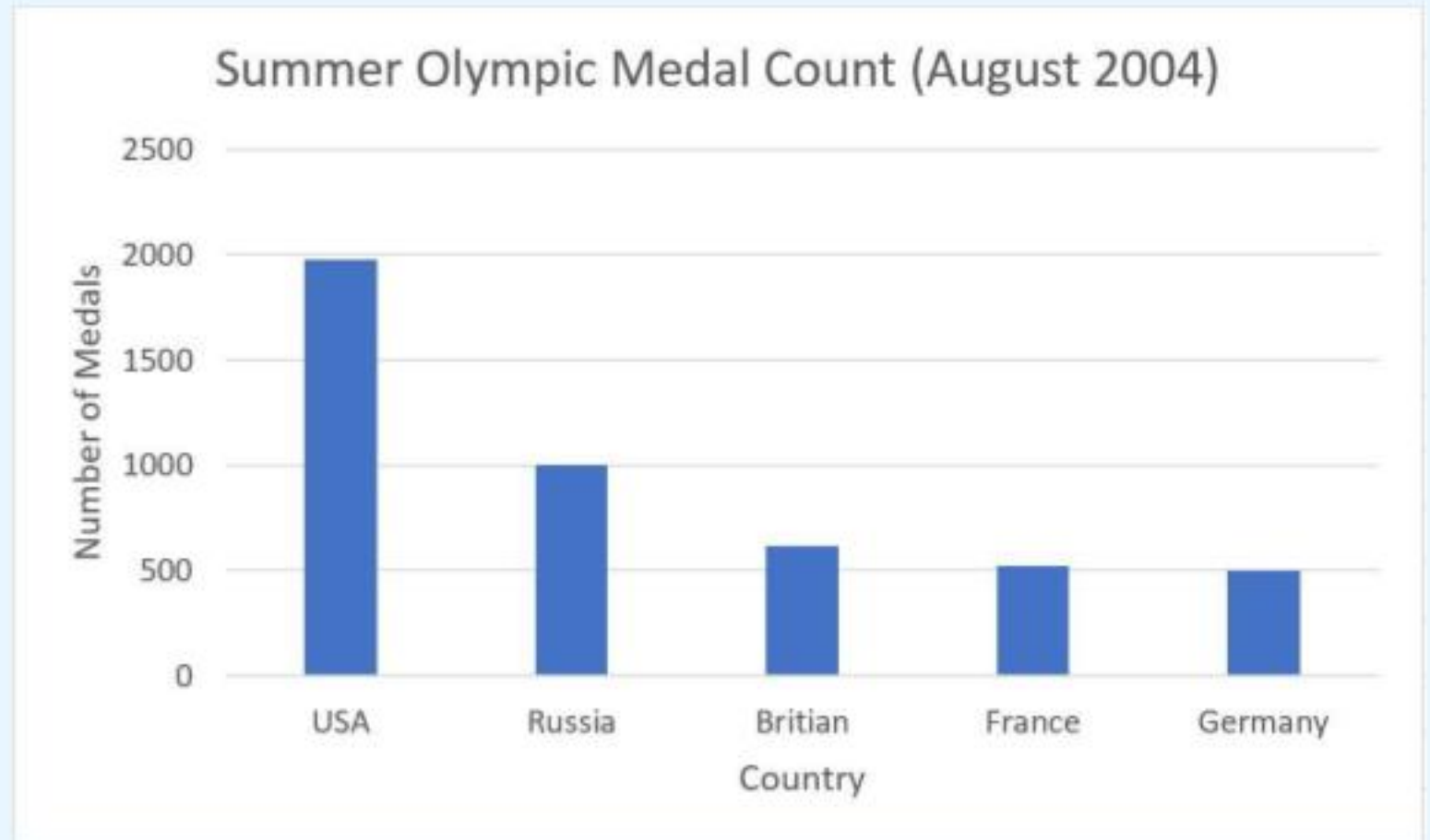Not Drawn to Scale (forbes.com) - Erickson Times

Description: The data is trying to show the number
of medals won of the top 5 countries in the Summer
Olympics up to August in 2004. The goal is to show
the medal counts where the US has the most and
Germany has the least.

Misleading: The medal visual is misleading due to
the scale. The medals go up by one per country
even though the numbers on the side indicate the
medals are not to scale. This is misleading because
it seems like Russia has earned almost the same
amount as the US even though the US has almost
1,000 more medals.

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Summer Olympic Medal Count*
(Up to August 2004)

Country	Medal
1. U.S.A.	1,975
2. Russia	999
3. Britian	615
4. France	523
5. Germany	499

*This medal count was based on the records of Agence France-Press
news service and may vary from other accounts. Initially, the
International Olympic Committee frowned upon national medal counts
and early reports are incomplete. In fact, from 1896 to 1906, athletes
registered as individuals and it was not uncommon for them to play on
the teams of other countries.

Slide Two: The Redesign

Explanation: The redesign shows that the the order of medals earned and by how much. At first glance one can see the US has much more than Russia. Also, one can see France and Germany are closer in medal count.
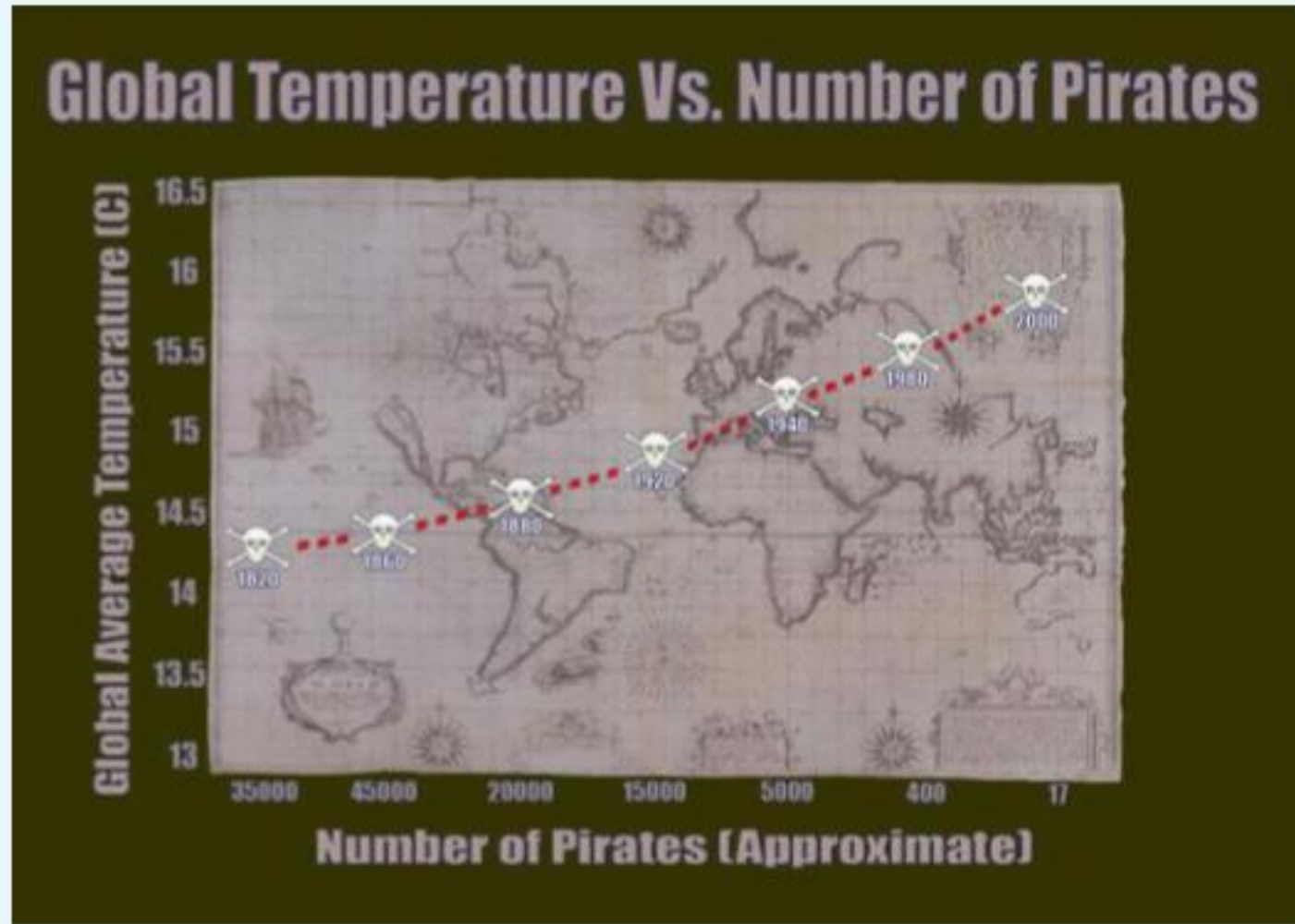
Summary Olympic Medal Count (August 2004)

Bar chart titled "Summer Olympic Medal Count (August 2004)" with Y-axis labeled "Number of Medals" (0 to 2500) and X-axis labeled "Country":
- USA: ~1975
- Russia: ~1000
- Britian: ~625
- France: ~525
- Germany: ~500

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Slide One: The Original

The Original Source: [True Fact: The Lack of Pirates Is Causing Global Warming (forbes.com)](#)

Description: The context is to portray the lack of pirates is causing global warming. The data is showing when the number of pirates decreases, then the global average temperature goes up.

Misleading: There is an issue with the logic. Although two events may happen at the same point in time it doesn't mean they are a cause and effect of each other. It looks like the pirates are moving across the map- but that's not relevant. Also, the y-axis does not start at 0. Lastly, the years are not distributed by the same metric and neither is the x-axis. This can be misleading because it creates a visual that is perfectly distributed even though the scale is off.

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Slide Two: The Redesign

Explanation: I changed both the y and x-axis to start at 0. I also got rid of the map in the background. At first glance one can see the trend is going down as the number of pirates decrease. The temperature and the year also decrease. The range of temperatures is more clear that it is in between 14-16 degrees (C).

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