Understanding Brexit Through Data

Brexit, the United Kingdom's decision to leave the European Union, wasn't just a political event—it was deeply personal, creating divisions among regions, generations, and even households. This project set out to explore the complexities of Brexit using data, uncovering how it affected the people and regions of the UK. Through patterns in voting, shifts in well-being, and the headlines that dominated public discourse, I turned the data into a story that is easy to follow and understand.

Key Questions This Project Explored

- **How did regions across the UK vote, and why?**
- **What were the emotional effects of Brexit?**
- **How did generations differ in their opinions?**
- **What were the key issues dominating the Brexit debate?**

To answer these questions, I worked with datasets that revealed voting patterns, emotional shifts, and public sentiment. Here's what the data showed and how it came to life through visualizations.

The Regional Divide

One of the most striking insights from the data was the clear divide between urban and rural regions. London, a densely populated and diverse city, was a stronghold of "Remain." In contrast, rural regions like Wales and the North East overwhelmingly supported "Leave."

Visual Example: A gradient-filled population density map helped illustrate this divide. Darker areas, representing higher population density, leaned "Remain," while lighter, rural areas leaned "Leave." This simple yet effective map made it clear how population and location influenced voting decisions.

Who Turned Out to Vote?

Scotland, a region that strongly favored "Remain," also had one of the highest voter turnout rates. In contrast, some "Leave" areas showed lower turnout, perhaps reflecting disillusionment or frustration.

Visual Example: Bar charts showing voter turnout by region revealed which parts of the UK were most engaged in the referendum. Scotland's high turnout paired with its strong "Remain" vote stood out prominently, emphasizing its commitment to EU membership.

The Emotional Toll of Brexit

The well-being data painted an emotional picture of Brexit's impact. Anxiety levels spiked after the referendum, particularly in Northern Ireland, where uncertainty about the Irish border caused significant stress. Meanwhile, regions like Scotland, which largely voted "Remain," experienced a noticeable drop in happiness and life satisfaction.

Visual Example: Line graphs tracking anxiety, happiness, and life satisfaction over time helped visualize these trends. A sharp increase in anxiety post-2017 was clear, especially in Northern Ireland. These graphs made the emotional toll of Brexit more tangible and relatable.

Generational Divides

The data revealed a stark divide between younger and older voters. People aged 18-24 overwhelmingly supported "Remain," seeing the EU as a symbol of opportunity and collaboration. Older voters, particularly those over 65, leaned strongly toward "Leave," prioritizing sovereignty and control.

Visual Example: A simple bar chart showed how each age group voted. Younger voters' overwhelming support for "Remain" contrasted sharply with older voters' strong preference for "Leave." This visual clearly highlighted how generations viewed Brexit differently.

What Were People Talking About?

Analyzing headlines from early 2020 revealed recurring themes in the Brexit conversation. Topics like "trade," "immigration," and "deal negotiations" dominated public discourse, reflecting the practical concerns of leaving the EU.

Visual Example: A word cloud created from Brexit-related headlines visually captured these themes. Words like "trade," "deal," and "immigration" appeared larger, showing their prominence in the national debate. This engaging visual provided a snapshot of the key issues people were focused on.

Making Data Interactive

To make the project more engaging, I built interactive dashboards using tools like Shiny and Plotly. These allowed users to:

- **Explore voting patterns** by clicking on regions in a map.
- **View emotional trends** by hovering over line graphs to see specific well-being metrics for each year.
- **Dive deeper into public discourse** by interacting with the dynamic word cloud.

These interactive tools turned the project from static charts into an experience, letting users explore the data in ways that were meaningful to them.

Key Insights

From the data and visualizations, a few key themes stood out:

1. **Urban vs. Rural Divide**: Urban areas like London, with their diverse populations and younger demographics, leaned "Remain," while rural regions with older populations leaned "Leave."
2. **Emotional Impact**: Anxiety levels spiked after the referendum, particularly in Northern Ireland, reflecting the stress of uncertainty. Happiness and life satisfaction also declined, especially in "Remain" regions.
3. **Generational Differences**: Younger voters saw the EU as an opportunity for global collaboration, while older voters valued independence and sovereignty.
4. **Dominant Issues**: Trade, immigration, and deal negotiations were the top concerns shaping public discourse, highlighting practical challenges and anxieties about the future.

Visual Storytelling in Action

Here's how the visual elements brought the story of Brexit to life:

- **Population Density Map**: Showed how geography influenced voting patterns.
- **Turnout Bar Charts**: Highlighted regions' engagement levels.
- **Sankey Diagram**: Illustrated the flow of "Leave" and "Remain" votes across regions, with thicker lines representing stronger support.
- **Well-Being Line Graphs**: Tracked changes in happiness, anxiety, and life satisfaction over time, making emotional trends clear.
- **Generational Voting Bar Charts**: Simplified the generational divide into a visual snapshot.
- **Word Cloud**: Provided a quick and engaging overview of the top Brexit issues in public discourse.

Reflections and Takeaways

This project was about more than just numbers; it was about the people behind them. Brexit wasn't just a political event—it was deeply personal for millions across the UK. The data revealed how geography, age, and emotions influenced the referendum and its aftermath. By turning these insights into clear visualizations and interactive tools, I was able to make a complex story accessible and engaging.

Looking back, the urban-rural divide, the emotional toll, and the generational differences stood out as defining aspects of Brexit. While there's always more to explore—like the long-term economic impacts or the role of social media in shaping opinions—this project provides a meaningful foundation for understanding Brexit's wide-reaching consequences.