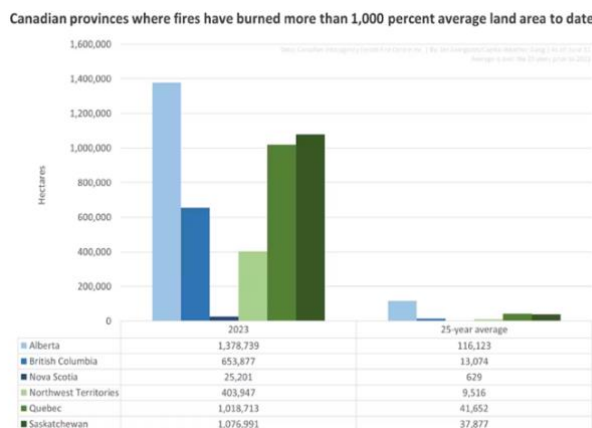


Graphic 1: A statistical graphic about the 2023 bushfires in Canada



Citation: Livingston I. Why Canada's wildfires are extreme and getting worse, in 4 charts. The Washington Post News [Internet]. 2023 Jun 12 [cited 2023 Aug 15]. Available from: <https://www.washingtonpost.com/weather/2023/06/12/canada-record-wildfire-season-statistics/>

Reason for choice: The statistical graphic illustrates how many bushfires happened in Canada in 2023 and the 25-year average. Using the graph's legend for Canadian provinces makes a more effective visualization for comparing the extent of bushfire damage across six Canadian provinces in two different periods.

Interpretation: Information in the graphic can be interpreted that the 25-year average of wildfires in all of Canada is relatively low compared to 2023 across six Canadian provinces. This comparison demonstrates the severity of the wildfires in 2023, with areas including Alberta, British Columbia, Nova Scotia, Quebec, and Saskatchewan being severely impacted. The order of forest area burned by area remains unchanged after 25 years. Although British Columbia is not the largest area of forest fire (Alberta with nearly 1.4 million hectares in 2023), British Columbia witnessed the largest increase in the forest fire area, which is 5,000% more than the historical norm.

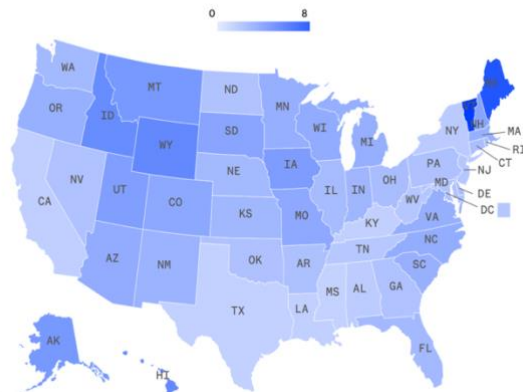
Critique: The format of the bar chart and table that is selected is an appreciated one for presenting the data. The bar chart supports to have a view of the general increase in the number of bushfires by comparing the size of symbols. Furthermore, the table provides detailed information across six Canadian provinces. The graph maintains proximity by grouping related data in each period. In addition, axes start from zero that remain consistent scale.

Strength	Weakness
(1) The graphic shows the detailed statistical information in the table. (2) The graphic does not have any distortion. (3) Using two contrasting tones to represent data for each of the three countries makes data visualization more efficient.	(1) The table information does not be arranged in order such as the increase in the figure of wildfires in each region. (2) The scale gap in the y-axis in the bar chart is bigger than all the data in the 25-year average making the size of the bar in each area look almost the same. (3) The data on the x-axis in the bar chart does not follow the year's order.

Graphic 2: A choropleth/thematic map relating to sport.

Pickleball U.S.A.

Adjusted for population, pickleball courts are most prevalent in the Northeast and Intermountain West.



Citation: Ramos E. Pickleball's the new jam: Why it's now the fastest-growing sport. NBC News [Internet]. 2022 Apr 20 [cited 2023 Aug 15]. Available from:

<https://www.nbcnews.com/data-graphics/pickleball-fastest-growing-sport-pandemic-rcna24620>

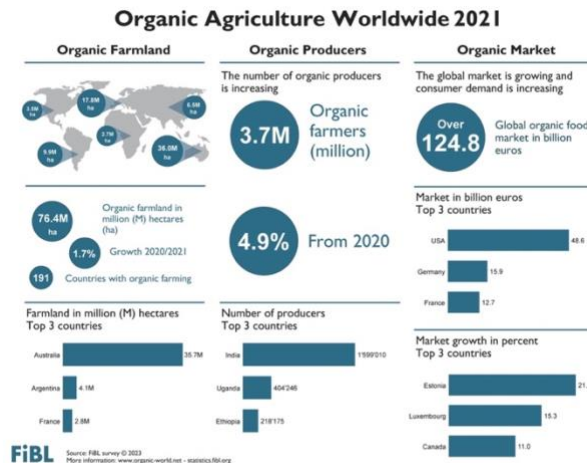
Reason for choice: The graphic presents the number of pickleball courts per 100,000 people in the USA in 2022. The use of contrasting colour palettes is the reason for the visualization of the sport's courts distribution across the USA.

Interpretation: At the core of the graphic depicts significantly as it unveils the substantial disparities in pickleball court prevalence across the nation, shedding light on the varying accessibility of these facilities. Based on the colour distribution in the picture, it can be seen that in general, pickleball is present in all states across the USA. The darkest colour distribution in the palette shows that the Northeastern United States specifically Vermont and Maine have the most pickleball courts with over 8 pickleball courts per 100,000 citizens. Followed by the Intermountain West, pickleball's popularity in this area is approximately half that of Vermont and Maine.

Critique: A choropleth map serves as a fitting choice for the dataset, effectively conveying the popularity data across each region. As for principles of graphics, proximity is harnessed to group-related data elements, as evident in the clustering of states on the map. The map's colour scheme aptly represents the range of data values, with darker colours indicating higher pickleball court prevalence. States with a higher prevalence of pickleball courts per capita share a dark blue hue, while states with a lower prevalence are shaded light blue.

Strength	Weakness
<ul style="list-style-type: none"> (1) The use of similar colours to denote similar data magnitudes aids in immediate comprehension. (2) It indicates a clear purpose to show the popularity of Pickleball in each region. (3) The map shows all the states in the USA. 	<ul style="list-style-type: none"> (1) The scale from 0 to 8 does not have a legend. (2) The map does not include specific details for each area. (3) The colour of the area where the most data is distributed is darker than the colour represented in the scale.

Graphic 3: A statistical infographic published within the last 2 years.



Citation: Global organic farmland and market continued to grow in 2021 [Internet]. Media release. 2023 Feb 14 [cited 2023 Aug 15]. Available from: <https://www.fibl.org/en/info-centre/news/global-organic-farmland-and-market-continued-to-grow-in-2021>

Reason for choice: Above is an infographic published in 2021 relating to organic agriculture fields over the world. This infographic is chosen as it gives us an insight into organic farming in 2021 divided into three parts: farmland, producers, and market along with the development compared to 2020.

Interpretation: In general, organic agriculture in 2021 was continuing to develop compared to the previous year which can be easily seen in the statistical information for both the number of organic farmland and organic producers. The graphic in the top left corner shows that Australia (nearly 36 million hectares of organic farmland) was the top continent in terms of organic agricultural area. Although India was not in the top 3 countries with the largest area of organic farming land, India was the country with the largest number of organic producers. The United States was the world's largest organic food consumer market with a market volume of about 49 billion euros, twice as much as Germany which is in the top 2.

Critique: The infographic uses maps and circle points to show general worldwide information. After that, the detail of the three countries in each part is listed in the bar chart as the last graphic in each category. In terms of graphic principles, the concept of contrast is excellently used to distinguish distinct data sets. Using the same colour scheme in the infographic helps the linked graphs create a coherent whole.

Strength	Weakness
(1) The label is utilized properly. (2) The combination of charts and text contributes to more data visualization. (3) The correlation between categories explains the importance of organic agriculture.	(1) A legend would explain what the different symbols represent. (2) The organic market does not have the comparison data with the previous year.

Graphic 4: A statistical graphic relating to business.

Inflation now falling throughout the western world

Rate of consumer price inflation in the previous 12 months, monthly



Chart: Peter Martin, The Conversation • Source: national statistical agencies • Get the data • Created with Datawrapper

Citation: Martin P. Australia is on the brink of ending RBA rate hikes and an economic first: beating inflation without a recession. ABC News [Internet]. 2023 Jul 19 [cited 2023 Aug 15]. Available from: <https://www.abc.net.au/news/2023-07-19/australia-brink-rate-hikes-economic-first-inflation-recession/102616070>

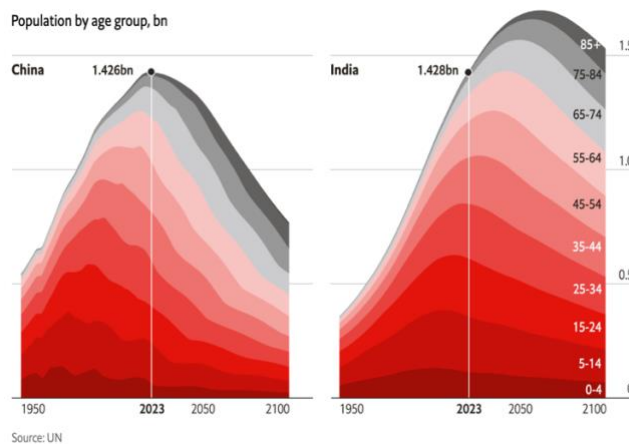
Reason for choice: The graphic indicates the inflation situation in Western nations throughout the 5 years from 2019. Figure 4 provides the efficacy of utilizing data visualization to succinctly portray and facilitate cross-country comparisons of inflation rates, enhancing the graphic's informative value.

Interpretation: The graph shows that the inflation rate of Western nations was unchanged relatively around 2% in 2019 before decreasing significantly to approximately 0. A sharp drop in demand for some goods and services will lead to lower inflation at the peak of Covid 19. After that, all four countries witnessed a sharp increase in inflation and all reached a peak in 2022. In the whole 5-year period, the UK had the highest inflation rate of the four countries at the end of 2022, at around 11%. This high inflation tends to decrease starting from the first half of 2023 in all four countries. In particular, inflation in the two American countries tends to decrease and decline faster than that of the UK and Australia.

Critique: The line graph is a straightforward efficient solution, that effectively illustrates temporal patterns of inflation in all four Western countries. As for principles of graphics, similarity unifies data representation by employing consistent scale and colour schemes across the line graph. Conversely, the principle of contrast distinguishes diverse data sets by using different colours for the bar charts corresponding to inflation rates in different countries. Axes start from zero that remain consistent scale.

Strength	Weakness
(1) A clear and succinct depiction of recent inflation trends (2) A clear title to convey the graph's message.	(1) The graph lacks context regarding the factors leading to the decline in inflation. (2) Lacks context regarding the factors driving the decline in inflation. (3) The omission of data for certain Western countries limits the comparison. (4) The colour tones seem to be similar such as black for UK and Australia and red for USA and Canada.

Graphic 5: A statistical graphic of your choice



Citation: India will soon overtake China as the world's most populous country. The Economist [Internet]. 2023 Jan 5 [cited 2023 Aug 15]. Available from:

<https://www.economist.com/graphic-detail/2023/01/05/india-will-soon-overtake-china-as-the-worlds-most-populous-country>

Reason for choice: The graphic presents the population by age group in China and India since 1995 and forecasts the population of these two countries in the future. The graphic is selected as it uses the colour scheme to visualize and compare the population by age group in China and India.

Interpretation: Although the graph shows that China had a larger population than India until 2023, the Indian population is projected to grow faster and overtake China's population in later years. In general, China has a larger proportion of young people than India, while India has a higher percentage of older people. As for China's population, it is expected to decrease by approximately 10% in 2050 compared to 2023. Otherwise, the Indian population is projected to increase and double that of China when it reaches a peak of about 1.8 billion by 2100. Especially, India is anticipated to contribute to an increase in the working-age population in the range of age from 15 to 64 years old.

Critique: In order to visualize the demographic structure of the population, the graphic uses the population pyramid. Regarding principles of graphics, data is presented succinctly and lucidly. In addition, the change in colour tone corresponding to age is significant for emphasizing the population distribution in each age group. The timeline including the past, present and future emphasizes the changing trend of population growth.

Strength	Weakness
(1) The colour scheme makes the graph easier to compare age groups. (2) The display of the fascinating data is well-designed.	(1) The graphic does not have a proper title. (2) Both axes lack labels. (3) The graph does not show the actual data for the population in each group.