# INFO 4602/5602 Information Visualization

**Individual Project Presentation** (Real-World Chart Evaluation)

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### Chart 1: Context for Before Chart

### Why

The chart was created to show the distribution of organic food sales in the U.S. by food category in 2005.

#### Who

It was created for consumers, industry professionals interested in organic food trends.

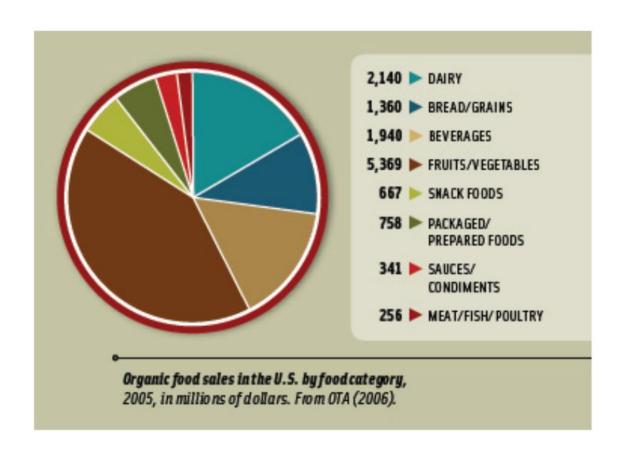
#### What

The creators wanted the audience to understand which organic food categories had the highest sales, highlighting market demand areas.

#### How

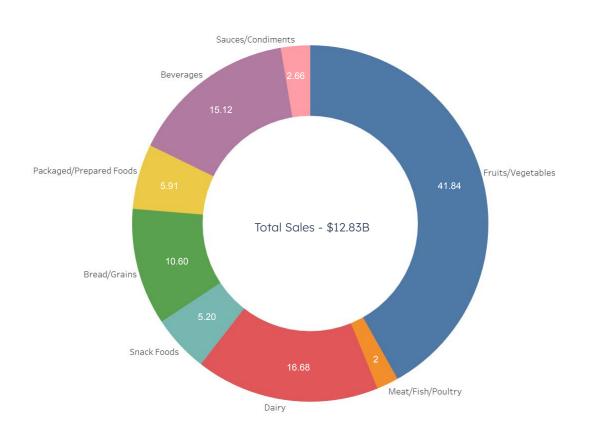
The data was sourced from the Organic Trade Association (OTA), published in 2006.

Chart 1: Before

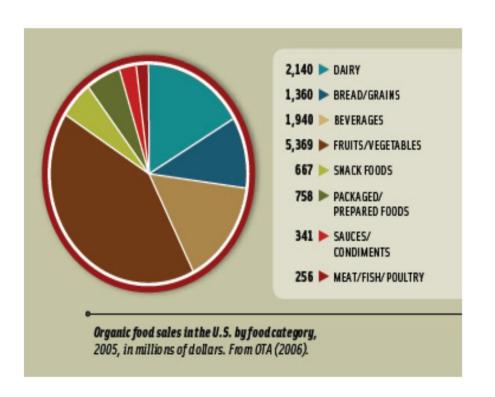


# Chart 1: After

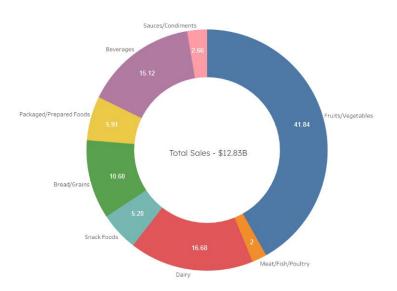
How Americans Spent on Organic Foods in 2005 (% of Total Sales)



### Chart 1: Before and After



How Americans Spent on Organic Foods in 2005 (% of Total Sales)



### Summary of Improvements Made to Chart 1

- Showing percentages instead of dollar values makes it much easier to quickly understand the relative contribution of each category to total sales.
- The donut chart provides a cleaner visual hierarchy, reducing clutter and making the chart more aesthetically appealing and user-friendly.
- Including the total sales value (\$12.83B) in the center of the donut chart draws immediate attention to the overall market size, adding important context without taking up additional space.

### Chart 2: Context for Before Chart

### Why

The chart was created to visualize the distribution of U.S. imports by country, highlighting each country's share of total imports in 2022.

#### Who

It was created for policymakers, economists, business leaders, and the general public interested in U.S. trade dynamics.

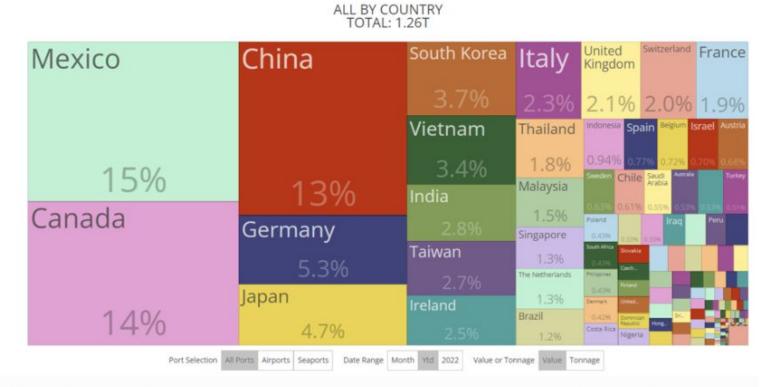
#### What

The creators wanted the audience to understand which countries are the largest sources of U.S. imports and to observe shifts in trade patterns, such as China's declining rank.

#### How

The data was sourced from U.S. Census Bureau trade statistics.

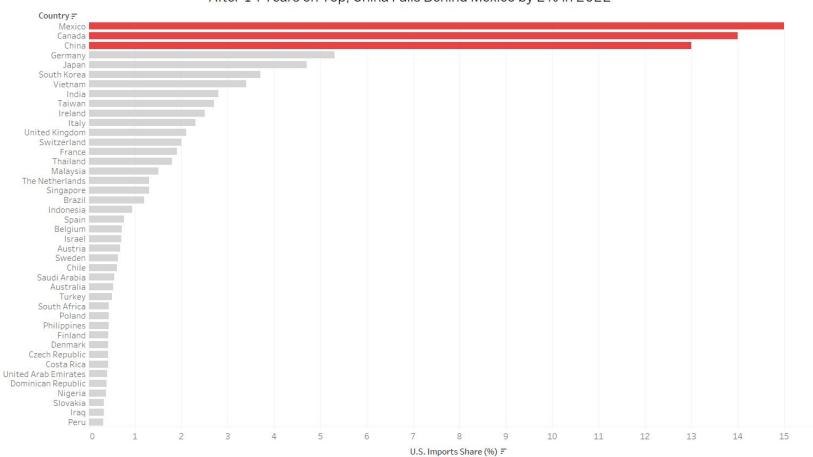
Chart 2: *Before* 



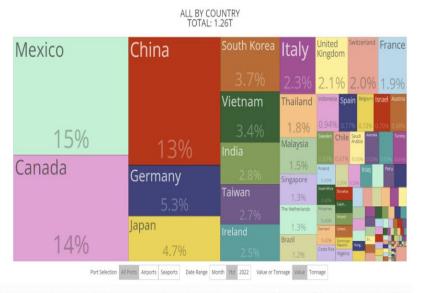
For the last 14 years, China has ranked as the top source of U.S. imports. As recently as five years ... [+] USTRADENUMBERS.COM

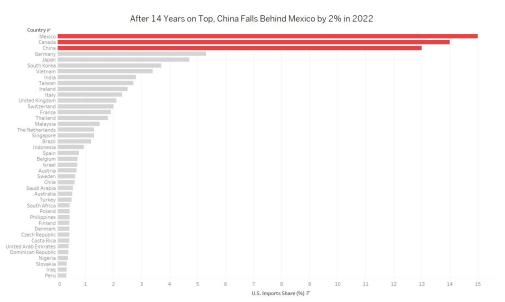
### Chart 2: After

After 14 Years on Top, China Falls Behind Mexico by 2% in 2022



## Chart 2: Before and After





For the last 14 years, China has ranked as the top source of U.S. imports. As recently as five years ... [+] USTRADENUMBERS.COM

### Summary of Improvements Made to Chart 2

- Transformed the treemap into a horizontal bar chart to provide a clearer comparison of U.S. import shares by country, making it easier to read and interpret relative rankings.
- Highlighted the top three countries (Mexico, Canada, China) in red to draw immediate attention to the most significant changes and trends in the data.
- Simplified the layout with a clean design and clear title, emphasizing the key insight that China has fallen behind Mexico after 14 years on top.

### Chart 3: Context for Before Chart

#### Why

The chart was created to illustrate the size and distribution of the global workforce in 2023, emphasizing the proportion working in the public sector.

#### Who

It was created for policymakers, government officials, and business leaders interested in workforce trends and public sector employment.

#### What

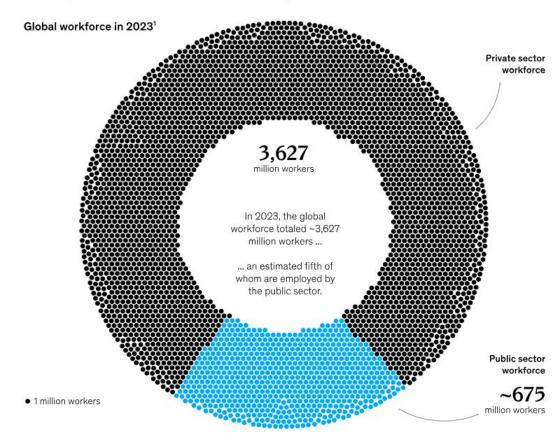
The creators wanted the audience to understand the scale of the public sector workforce (approximately one-fifth of the total global workforce) and the challenges governments face in managing it effectively.

#### How

The data was sourced from the OECD and the World Bank, as noted in the chart's footnote.

# Chart 3: *Before*

Globally, governments face the dual challenge of serving both their employees and their citizens effectively.



'Total of OECD economies, Source: OECD: World Bank

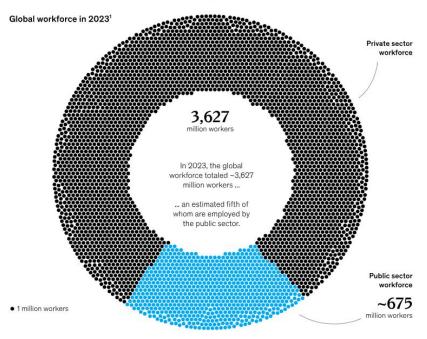
# Chart 3: *After*

Private Sector 2902M Global Workforce in 2023 3627 Million Workers

> Public Sector 725M

# Chart 3: Before and After

Globally, governments face the dual challenge of serving both their employees and their citizens effectively.



**Private Sector** 2902M

Global Workforce in 2023 3627 Million Workers

> Public Sector 725M

'Total of OECD economies. Source: OECD; World Bank

### Summary of Improvements Made to Chart 3

- Simplified the visualization by using a clean, easy-to-read bar chart instead of the crowded dot representation, making the data clearer and less visually overwhelming.
- Accurately represented numbers with clear labels, improving numerical clarity and reducing confusion about proportions.
- Addressed inconsistency in the original chart, where the stated public sector figure (675M) didn't precisely reflect the 1/5th ratio of the total workforce (which should be closer to 725M).
- Enhanced readability by focusing on the key message without unnecessary design elements, making it easier for viewers to quickly grasp the scale of the global workforce distribution.

### Sources

1. Chart 1 - <a href="https://www.ift.org/news-and-publications/food-technology-magazine/issues/2006/october/features/organic-foods">https://www.ift.org/news-and-publications/food-technology-magazine/issues/2006/october/features/organic-foods</a>

2. Chart 2 -

https://www.forbes.com/sites/kenroberts/2023/07/11/after-14-years-on-top-china-now-ranks-third-for-us-imports/

3. Chart 3 -

https://www.mckinsey.com/featured-insights/sustainable-inclusive-growth/charts/a-massive-global-workforce

