

DATA VISUALISATION PORTFOLIO



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Table of Contents	
TASK A: DATASET SELECTION	3
TASK B: ADDITIONAL DATASET	
TASK C: VISUALISATIONS	5
Visualisation 1:	
Visualisation 2:	9
Visualisation 3:	13
Visualisation 4:	17
Visualisation 5:	
Visualisation 6:	24
TASK D: CRITICAL ASSESSMENT OF A VISUALISATION	28
Table of Figures	
Figure 1: up2280493. (2025). Giannis Antetokounmpo: Points and Opponents in the Last 10 Games [Bar Chart]. Tableau	5
Figure 2: up2280493. (2025). The Most Beautiful News of 2023: Awesomeness Ratings by Category [Pictogram]. Tableau	9
Figure 3: up2280493. (2025). Children Registered for the NHS Wheelchair Service [Packed Bubbles]. Tableau	
Figure 4: up2280493. (2025). The Rise of AI: Number of Models Announced (2018-2024) [Line Chart]. Tableau	17
Figure 5: up2280493. (2025). 2024/25 Integrated Care Board Financial Allocations [Donut Chart]. Tableau	20
Figure 6: up2280493. (2025). Hollywood's Most Profitable Films by Studio (2007-2011) [Tree Map]. Tableau	24
Figure 7: Park, H., & Quealy, K. (2019). <i>Drought's footprint</i> . [Facet Map] The New York Times. https://archive.nytimes.com/www.nytimes.com/interactive/2012/07/20/us/drought-footprint.html	28

TASK A: DATASET SELECTION

Row	Dataset selected
1	Antetokounmpo fantasy stats EA
2	Most Beautiful News of 2021,22,23 EA
3	National-Wheelchair-Data-Collection-Results-July-September-2024-1 EA
4	IIB LLMs public new EA
5	CBP ICB Allocation 2022- 2025 EA

TASK B: ADDITIONAL DATASET

Dataset title	Hollywood's Most Profitable Stories
Justification	This dataset offers valuable insights into the financial performance of films across various factors. The dataset enables an analysis
	of trends in the film industry, including the relationship between profitability and audience reception, the impact of lead studios on
	revenue, and the performance of different genres over time.

Dataset Description:

Column	Description	Number of null values
Film	The title of the movie	0
Genre	The movie's category (e.g., Action, Drama, Comedy).	0
Lead Studio	The production studio that is responsible for the film.	1
Audience Score (%)	A percentage-based score reflecting audience reception.	1
Profitability	A numerical representation of the movie's profitability	3
Rotten Tomatoes (%)	The critic rating from Rotten Tomatoes indicating critical reception	1
Worldwide Gross	The total revenue earned worldwide	0
Year	The release year of the film.	0

I did not make any modifications to the dataset; instead, I used Tableau to filter out the null values.

<u>Academic reference</u>: Tableau Public. (n.d.). *Hollywood's most profitable stories* [Data set]. Tableau Public. https://public.tableau.com/app/sample-data/HollywoodsMostProfitableStories.csv

TASK C: VISUALISATIONS VISUALISATION 1

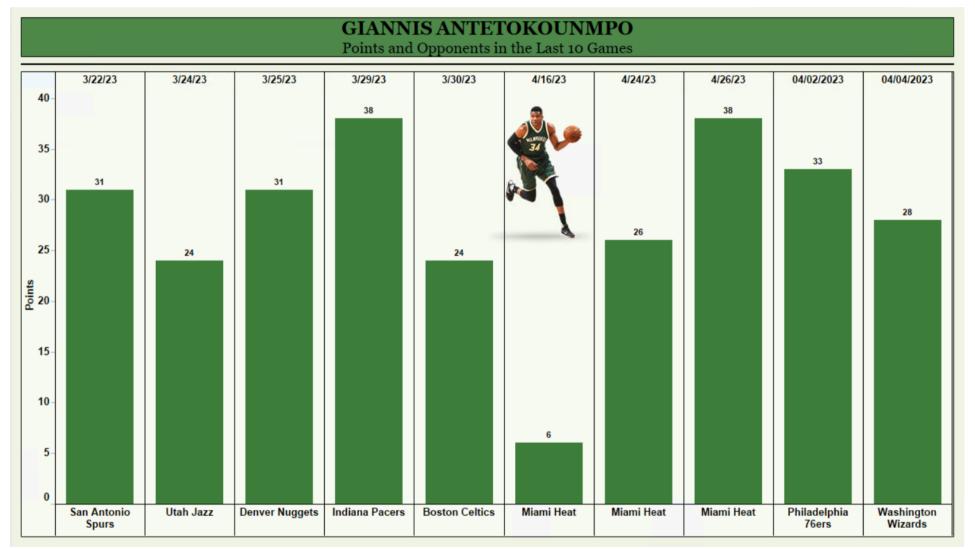


Figure 1: up2280493. (2025). Giannis Antetokounmpo: Points and Opponents in the Last 10 Games [Bar Chart]. Tableau.

Dataset Name: ANTETOKOUNMPO FANTASY STATS

ID: Antetokounmpo fantasy stats EA

Visualization: A bar chart showing Giannis' points and opponents in the last ten games.

Intended display medium: This visualisation would be published in a newspaper's sports section.

Purpose: The visualization helps identify trends, consistency, and variations in his performance across different matchups.

Main message:

Antetokounmpo's recent scoring performance varies across different teams, highlighting key trends in his gameplay. The chart allows for quick comparisons, showcasing his strengths against certain opponents and potential challenges against others.

Target audience:

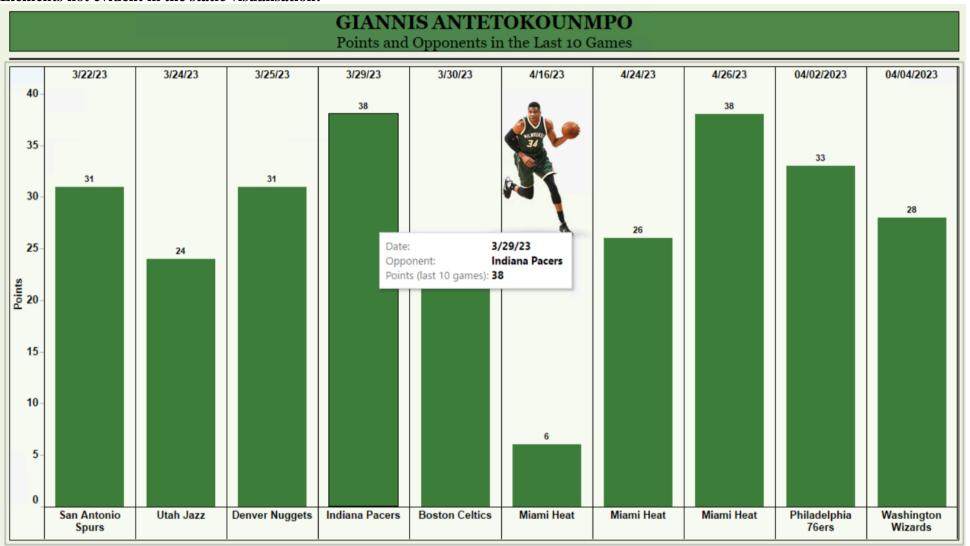
Sports Analysts, Coaches, Journalists, Fans, and Enthusiasts.

Design choices and adherence to the 4C aspects:

I used two shades of green to make the chart visually appealing. Each bar has the total points in bold at the top to enhance interpretability. I added a picture of Giannis with his team jersey to enhance attractiveness.

4C Principle	Application in the dataset
Clean	I used a well-structured layout with minimal clutter and a balanced color scheme.
Clear	Axis titles, labels, and legends ensure that the data is easy to interpret.
Concise	Only relevant data (points vs. opponents) is displayed without unnecessary elements.
Captivating	I used color, layout, and subtle design elements (e.g., bold fonts) to draw attention to key insights.

Elements not evident in the static visualisation:



The hover feature gives a summary of the date, opponent, and points for every single bar on the chart.

Impact of visualisation:

The visualization highlights Giannis Antetokounmpo's scoring trends over his last 10 games, aiding game strategy and player assessment. Its impact is measured through performance analysis, expert feedback, and coaching influence, with data collected from official game logs and validated in Tableau. User testing with basketball fans assessed its clarity and usefulness.

VISUALISATION 2

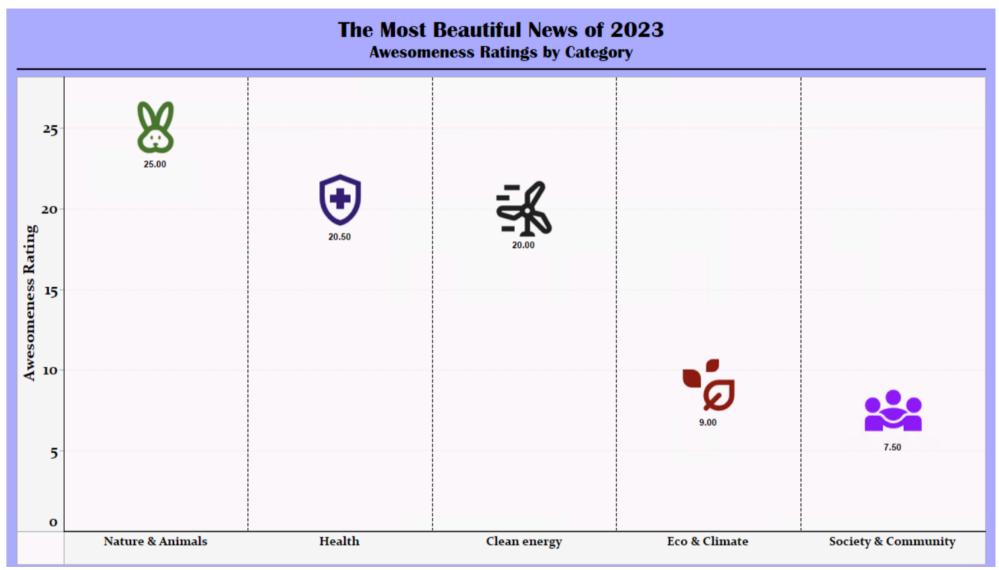


Figure 2: up2280493. (2025). The Most Beautiful News of 2023: Awesomeness Ratings by Category [Pictogram]. Tableau.

Dataset Name: Most Beautiful News of 2021, 2022, 2023

ID: Most Beautiful News of 2021,22,23 EA

Visualization: A pictogram displaying the awesomeness rating for various news categories in 2023.

Intended display medium: The pictogram is intended for publication in a Lifestyle and Wellness blog.

Purpose: It aims to highlight the most inspiring, heartwarming, and uplifting moments of the year while making data exploration enjoyable for blog readers.

Main Message:

The visualization communicates that positive news stories can be measured, categorized, and compared based on their awesomeness ratings. Using a pictogram makes the abstract concepts, such as "beautiful news," more tangible, reinforcing the idea that good news is both impactful and quantifiable.

Target Audience:

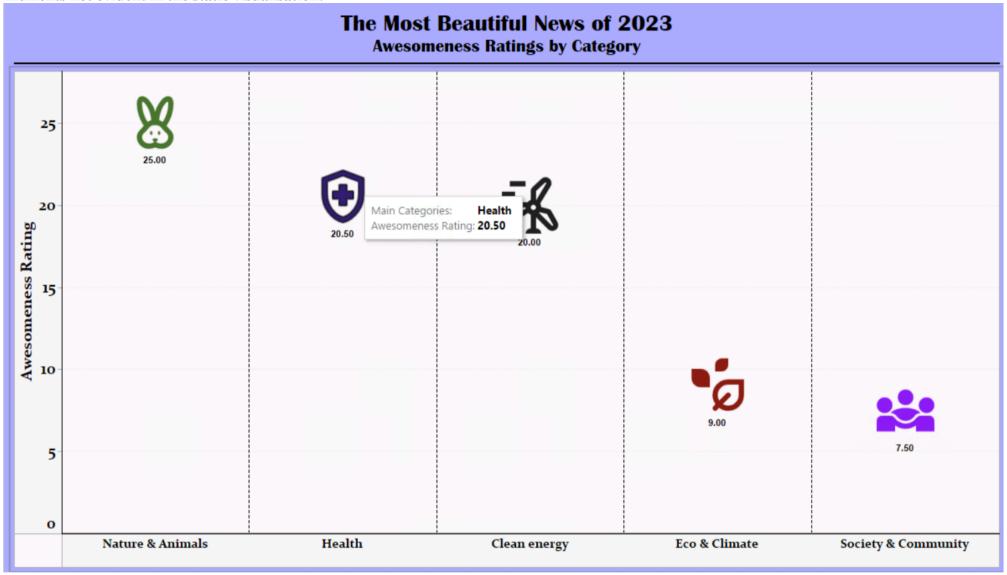
Blog readers Social media Journalists

Design choices and adherence to the 4C aspects:

I used column grid lines to separate the news categories. I assigned bold icons to represent each category. The rating appears under each icon in bold to enhance readability and interpretability. I chose a warm background color to bring out the lightness of the topic.

4C Principle	Application in the dataset
Clean	A simple, uncluttered layout with structured elements.
Clear	Well-labeled categories and ratings make it easy to interpret.
Concise	Only essential data is displayed, keeping the story direct.
Captivating	Pictograms, engaging colors, and an interactive feel make the dashboard visually appealing.

Elements not evident in the static visualisation:



The hover feature gives a summary of the category and the awesomeness rating that each icon represents.

Impact of visualisation:

The visualization encourages readers to engage with positive news, helps identify resonant story types, and boosts social media sharing. Its impact is measured through engagement metrics, survey feedback, and social media shares and comments.

VISUALISATION 3

Children Registered for the NHS Wheelchair Service An overview of paediatric wheelchair service registrations by region(July-September 2024)

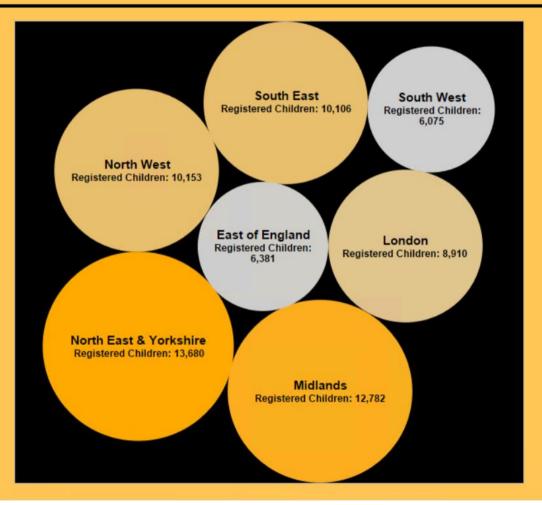


Figure 3: up2280493. (2025). Children Registered for the NHS Wheelchair Service [Packed Bubbles]. Tableau.

Dataset Name: National-Wheelchair-Data-Collection-Results-July-September-2024-1 EA

ID: National-Wheelchair-Data-Collection-Results-July-September-2024-1 EA

Visualization: Packed bubbles to show paediatric wheelchair registrations by region.

Intended display medium: This visualization is designed for an online medical journal, where healthcare professionals and policymakers can analyse regional trends in NHS paediatric wheelchair registrations. It may also be featured in interactive digital reports or research articles

Purpose: This visualization aims to highlight regional differences in NHS paediatric wheelchair registrations, helping policymakers, healthcare professionals, and the public understand distribution trends and identify areas needing improved accessibility.

Main Message:

The size of each bubble represents the volume of registrations in each region, making it easy to compare regional differences at a glance.

Target Audience:

Healthcare policymakers NHS administrators. Disability advocacy groups The general public

Design choices and adherence to the 4C aspects:

I used black and yellow to enhance contrast and readability. I assigned bold labels to enhance readability and interpretability.

4C Principle	Application in the dataset
Clean	I used a muted background to keep focus on the bubbles.
Clear	Bubble sizes proportionally represent registration numbers for intuitive understanding.
Concise	Limited labels to essential regions to avoid clutter.
Captivating	Applied color gradients to differentiate high and low registration areas.

Elements not evident in the static visualisation:

Children Registered for the NHS Wheelchair Service An overview of paediatric wheelchair service registrations by region(July-September 2024)



Clicking on each bubble enhances readability and makes it easier to understand the data.

Impact of visualisation:

The visualization raises awareness of regional disparities in NHS paediatric wheelchair registrations and engages stakeholders through interactive insights. The impact is measured through stakeholder survey feedback to assess whether the visualization is clear, useful, and actionable.

VISUALISATION 4

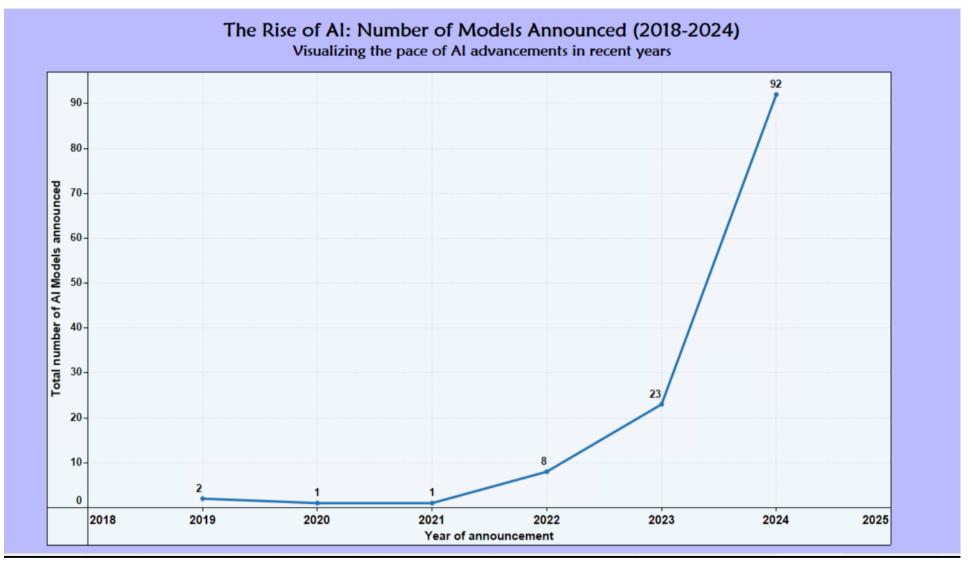


Figure 4: up2280493. (2025). The Rise of AI: Number of Models Announced (2018-2024)[Line Chart]. Tableau.

Dataset Name: IIB LLMs public new EA

ID: <u>IIB LLMs public new EA</u>

Visualization: A line chart showing the number of AI models announced in the previous years.

Intended display medium: This visualization is designed for social media platforms like LinkedIn or Twitter to engage with tech communities and AI enthusiasts.

Purpose: To showcase the rapid growth in the number of AI models announced between 2018 and 2024, highlighting trends and providing context for the growing impact of AI technologies.

Main Message: The chart visually demonstrates an upward trend in AI model announcements, with notable peaks indicating significant milestones in AI development and adoption over the past few years.

Target Audience:

AI researchers and developers Tech industry professionals Tech enthusiasts

Explanation of design choices regarding attractiveness, usability, readability, and adherence to the 4C aspects (clean, clear, concise, captivating): I assigned bold labels to enhance readability and interpretability.

4C Principle	Application in the dataset	
Clean	I used a minimalistic design, with a simple grid and light background to keep the focus on the data.	
Clear	I used a single line to track the model announcements, making it easy to follow the trend over time.	
Concise	Time years are marked on the x-axis, and the y-axis is labeled with the number of models, ensuring clear data	
	interpretation.	
Captivating	The line and labels highlight the progression of AI development, making the data visually engaging while maintaining	
	readability.	

Elements not evident in the static visualisation:

All elements are evident in the static visualisation.

Impact of visualisation:

The visualisation highlights the rapid growth of AI model announcements over time. The impact can be measured through tracking shares, retweets, and comments on platforms like LinkedIn or Twitter, indicating how effectively the visualization resonates with the audience.

VISUALISATION 5

2024/25 Integrated Care Board Financial Allocations NHS Core Services Funding Distribution by Region (in Millions of Pounds)

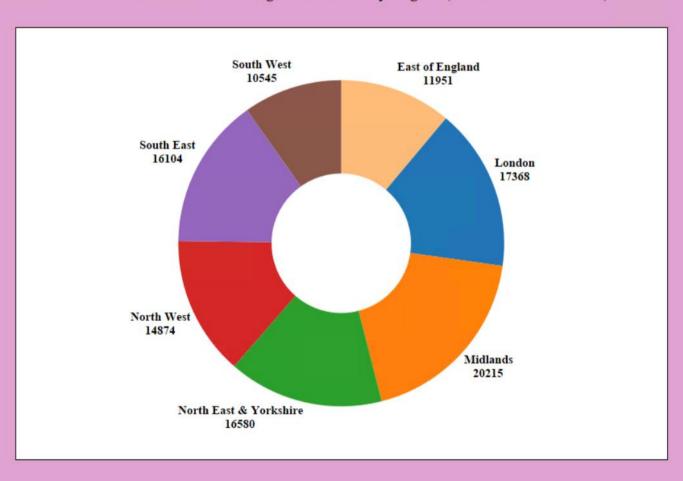


Figure 5: up2280493. (2025). 2024/25 Integrated Care Board Financial Allocations [Donut Chart]. Tableau.

Dataset Name: CBP ICB Allocation 2022- 2025 EA

ID: CBP ICB Allocation 2022- 2025 EA

Visualization: A donut chart showing the NHS core services funding distribution by region for 2024/25.

Intended display medium: This donut chart is designed for digital reports or interactive dashboards that can be shared with NHS administrators, policymakers, and financial analysts.

Purpose: To show the financial distribution of NHS core services across different regions in the 2024/25 financial year, enabling stakeholders to understand the allocation patterns and identify disparities in funding.

Main Message:

The chart conveys how the total NHS core services budget for 2024/25 is distributed across various regions, highlighting which regions receive the most or least funding.

Target Audience:

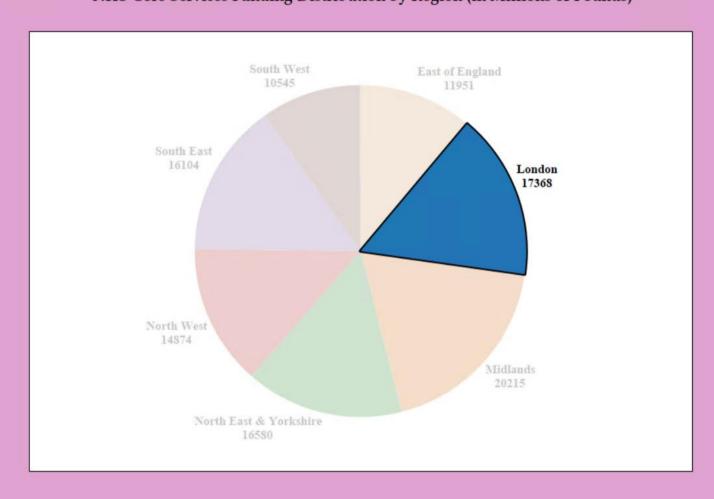
NHS financial planners and administrators Healthcare researchers and journalists Healthcare advocacy groups

Explanation of design choices regarding attractiveness, usability, readability, and adherence to the 4C aspects (clean, clear, concise, captivating): I assigned bold labels to enhance readability and interpretability.

4C Principle	Application in the dataset
Clean	The donut chart uses a simple, segmented design with clear labels and a muted background to keep focus on the data.
Clear	Each segment of the donut chart is clearly labeled with the region's name and its financial allocation, making it easy to compare
	allocations.
Concise	The chart presents a single key message—the financial allocation by region—without excessive information.
Captivating	The color-coded segments help differentiate regions and make the chart visually engaging while maintaining clarity.

Elements not evident in the static visualisation:

2024/25 Integrated Care Board Financial Allocations NHS Core Services Funding Distribution by Region (in Millions of Pounds)



Clicking on each slice enhances readability and makes it easier to understand the data.

Impact of visualisation

The visualization provides a clear view of the financial allocations for NHS core services across different regions, making it easier for policymakers, administrators, and stakeholders to identify regional funding disparities. The impact can be measured through survey feedback collected from NHS administrators, policymakers, and stakeholders to assess the clarity and usefulness of the chart in informing funding decisions.

VISUALISATION 6

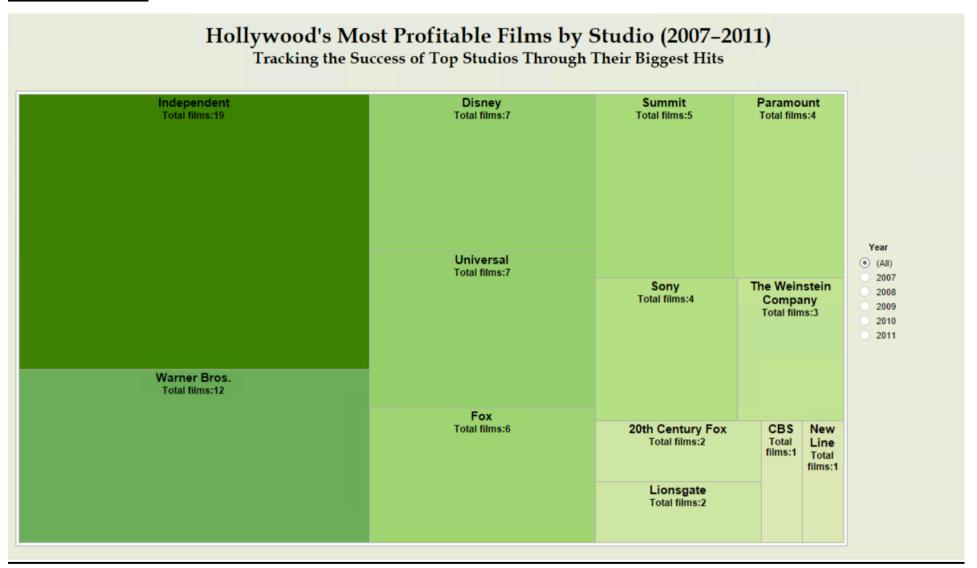


Figure 6: up2280493. (2025). Hollywood's Most Profitable Films by Studio (2007-2011) [Tree Map]. Tableau.

Dataset Name: Hollywood's Most Profitable Stories

ID: https://public.tableau.com/app/sample-data/HollywoodsMostProfitableStories.csv

Visualization: A tree map to show Hollywood's most profitable films for each studio between 2007 and 2011.

Intended display medium: This tree map is designed for film industry presentations or media-related blog posts.

Purpose of Your Visualization: To highlight the profitability of Hollywood films from different studios between 2007 and 2011, allowing viewers to easily compare the success of films by studio and year.

Main Message:

The heat map visually conveys the most profitable films for each studio during the period, with the color intensity representing the level of profitability, and filters allowing users to focus on specific years.

Target Audience:

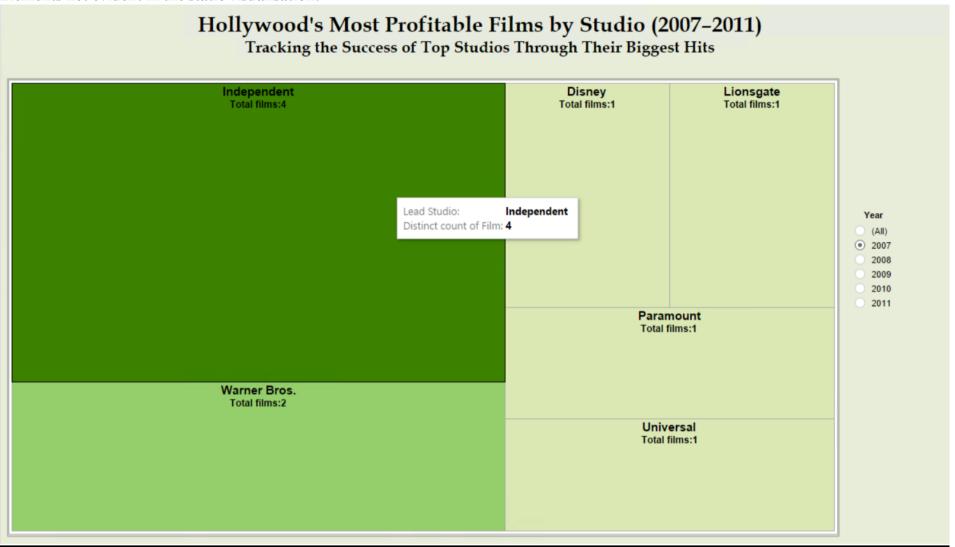
Film industry professionals Entertainment journalists Movie enthusiasts

Design choices and adherence to the 4C aspects:

I assigned bold labels to enhance readability and interpretability.

4C Principle	Application in the dataset	
Clean	The design uses a simple grid layout for each film and studio, ensuring clarity.	
Clear	Color gradients indicate the number of films, with darker colors representing more profitable films, making the data easy to interpret at a glance.	
Concise	The tree map focuses only on the most profitable films, displaying the necessary data without overwhelming the viewer.	
Captivating	The color intensity makes the visualization visually engaging, while also making it easy to spot the most profitable films quickly.	

Elements not evident in the static visualisation:



Yearly filters enable users to view the most profitable films by studio for each specific year, facilitating year-over-year performance analysis. Hover tooltips display additional information about each film's exact profitability and studio when hovering over a cell in the tree map.

Impact of visualisation:

It reveals trends in the profitability of Hollywood films by studio and year, enabling data-driven decision-making for industry professionals and investors. The impact can be measured through feedback from industry professionals and stakeholders to gauge the usefulness and clarity of the visualization in making business or investment decisions.

TASK D: CRITICAL ASSESSMENT OF A VISUALISATION

Drought's Footprint

More than half of the country was under moderate to extreme drought in June, the largest area of the contiguous United States affected by such dryness in nearly 60 years. Nearly 1,300 counties across 29 states have been declared federal disaster areas. Areas under moderate to extreme drought in June of each year are shown in orange below. Related Article >

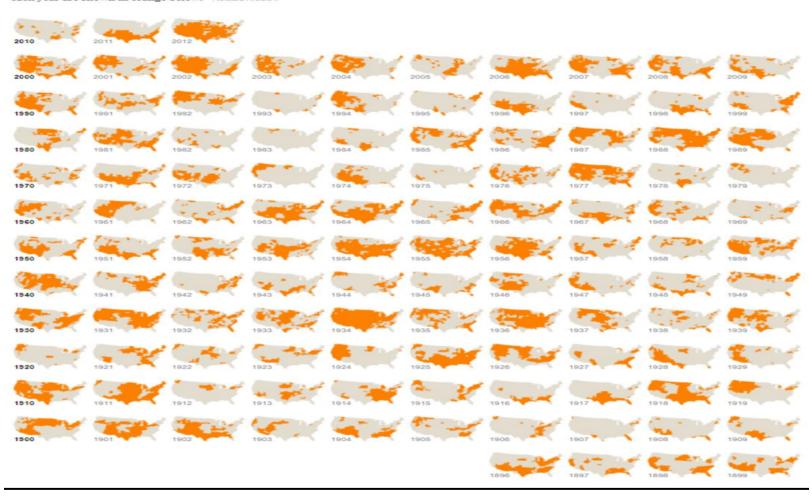


Figure 7: Park, H., & Quealy, K. (2019). *Drought's footprint*. [Facet Map] The New York Times. https://archive.nytimes.com/www.nytimes.com/interactive/2012/07/20/us/drought-footprint.html

Reasons for improvement:

Poor clarity	The visualization lacks clarity due to unclear labelling, a lack of a legend, and an ambiguous use of the orange colour, which	
	makes it difficult to understand the data.	
Excessive Detail without	The excessive detail of 100 years of data across small individual maps overwhelms viewers, making it hard to spot trends and	
Context	compare maps effectively.	
Limited Colour Coding	The limited colour scheme of orange and white is confusing, and the map's space utilization is inefficient, leading to information	
_	overload.	
Inefficient Space Utilization	This map grid takes up a large amount of space, and the small, individual maps do not scale effectively for meaningful visual	
_	comparisons. The excessive number of small maps can lead to information overload and reduce the effectiveness of the	
	visualization	

To improve the visualization, a clear legend should be added to explain the colour scheme and data, and the number of maps should be reduced by grouping years into larger maps or using an interactive feature for filtering. Additionally, grouping maps by decades or milestones would help identify trends, and using more distinct colours would enhance data interpretation.