Case study checklist

# Analyzing a graph

* Does the graph have a clear and informative title that describes what it represents?
* Are the axes labels examined to understand what is being measured and the units used?
* Is the source of the data verified, and is it from a reputable source?
* Is there a citation or reference to the data source, if available?
* Were multiple data sources used?
* Is the range of data values on the axes examined to understand the scope of the data?
* Are the data points or data series on the graph examined?
* Are any outliers or unusual data points identified?
* If applicable, is the legend reviewed to understand color-coding or labeling used to distinguish data series?
* Are any trends in the data identified, such as increasing or decreasing values, fluctuations, or seasonal patterns?
* Are patterns, such as correlations, clusters, or anomalies, looked for that may be relevant to the analysis?
* Is the distribution of data points assessed, such as whether they are normally distributed or skewed?
* Is the variability in the data analyzed, including measures of dispersion like standard deviation?
* Are cause-and-effect relationships between variables represented on the graph determined?
* If present, is the interpretation of confidence intervals or error bars done to understand the level of uncertainty in the data?
* If applicable, is it assessed whether the data supports or refutes a specific hypothesis?
* Is the broader context in which the data was collected considered, and how might this context affect the interpretation of the graph?
* If relevant, is the current data compared with other analyses, sources, and historical data to identify trends or changes?
* Are statistical tests or calculations performed to validate observations or hypotheses, such as t-tests, ANOVA, regression analysis, etc.?
* Are any limitations of the data or analysis acknowledged, including potential sources of error?
* Is the level of uncertainty in the conclusions discussed?
* Is the quality of the graph itself assessed, including clarity, appropriateness of visual elements, and adherence to best practices?

# Effective storytelling

* Is the headline concise, accurate, and indicative of the article's content?
* Does the introduction provide context and explain the significance of the data presented?
* Is the purpose of the data storytelling clear from the start?
* Are data visualizations effectively integrated into the article's narrative?
* Do the visuals enhance the understanding of the story?
* Is the source of the data clearly stated?
* Is the data source reputable, and are there references or citations?
* Is the data interpreted and explained in a way that is accessible to the target audience?
* Are key findings or insights highlighted?
* Does the article follow a clear narrative structure, such as a beginning, middle, and end?
* Are data-driven insights presented in a logical sequence?
* Do data visualizations use effective design elements like color, typography, and layout?
* Are the visuals aesthetically pleasing and easy to comprehend?
* Is the data placed in the broader context of the issue or topic?
* Does the article explore the implications of the data?
* Is the accuracy and reliability of the data addressed, including any potential limitations or sources of error?
* Are there ethical considerations discussed, such as data privacy or potential biases?
* Does the article adhere to ethical data storytelling and analysis practices?
* Does the article compare the data to other sources?
* If applicable, does the article incorporate interactive data features or tools for readers to explore the data themselves?
* Is the language used in the article clear and understandable, avoiding jargon or overly technical terms?
* Is the article accessible to a broad audience?