# News Analysis Dashboard - Detailed Report

This report provides a detailed analysis of the News Analysis Dashboard, which tracks trends in Fake News versus Real News. The dashboard offers insights into total news articles, the distribution between fake and real news, trends over time, and breakdowns by news source and category.

## 1. Key Metrics

The dashboard displays the following key metrics:  
- Total Articles: 20K  
- Real Articles: 9,944  
- Fake Articles: 10K  
- Fake News Percentage: 50.28%  
  
These figures indicate that just over half of the analyzed articles were classified as fake news.

## 2. Visual Components

### 2.1 Fake News vs Real News Distribution

A donut chart is used to represent the proportion of Fake News and Real News. This visual quickly conveys the near-equal distribution between the two categories.

### 2.2 Trend of Fake News Over Time

A line chart depicts the trend of fake news from 2022 to 2025. The count of fake news articles rose sharply from 2022 to 2023, remained stable in 2024, and then dropped significantly in 2025.

### 2.3 Real vs Fake News Count Per Month

A clustered bar chart shows monthly counts for real and fake news. Each month has a consistent distribution pattern, suggesting a steady publication rate throughout the year.

### 2.4 Fake News Count by Source

A bar chart displays fake news counts across sources such as Daily News, NY Times, CNN, Fox News, and others. Most major sources have similar fake news counts, except 'Not Known', which has significantly fewer articles.

## 3. Sample Articles (2022)

A sample table lists fake and real article titles from September to December 2022. These samples illustrate the nature of data being analyzed, although the text samples provided appear to be placeholder text.

## 4. Fake and Real News by Category

The 'Fake and Real News by Category' bar chart breaks down counts by categories such as Health, Business, Entertainment, Sports, Technology, Politics, and Science. The distribution is relatively uniform across categories.

## 5. Real vs Fake per Source

This visualization shows counts of fake and real news for each source. The proportions are similar across most sources, indicating that no single source dominates in fake or real news output.

## 6. Calculations Used

The following DAX calculations were used to derive metrics:  
• Total News = COUNTROWS('FakeNews')  
• Fake News Count = CALCULATE(COUNTROWS('FakeNews'), 'FakeNews'[label] = "Fake")  
• Real News Count = CALCULATE(COUNTROWS('FakeNews'), 'FakeNews'[label] = "Real")  
• Fake News % = DIVIDE([Fake News Count], [Total News], 0) \* 100

## 7. Conclusion

The News Analysis Dashboard provides an effective overview of fake versus real news trends. It highlights that fake news constitutes a substantial portion of published content. By tracking trends over time, by source, and by category, this dashboard can help organizations, researchers, and policymakers identify patterns and target interventions to reduce misinformation.