Titanic Survival Analysis Dashboard Report

This dashboard presents an interactive analysis of the Titanic disaster dataset, highlighting survival patterns across different demographics, ticket classes, and embarkation points. It provides insights into passenger survival based on sex, age, and socio-economic factors.

Key Findings

1. **Total Survivors**

   o Out of all passengers, **342 survived** the disaster, representing the minority of total onboard.

2. **Survival by Sex**

   o **Females had a significantly higher survival rate** (68.13%, 233 survivors) compared to males (31.87%, 109 survivors).

   o This aligns with the "women and children first" rescue protocol followed during the evacuation.

3. **Survival by Embarkation Point**

   o Most survivors boarded at **Southampton (S)**, contributing the highest fare total among embarkation points.

   o Passengers embarking from **Cherbourg (C)** also show notable survival counts, while very few survivors came from **Queenstown (Q)**.

4. **Survival by Passenger Class and Age Group**

   o Younger passengers (under 18) showed a relatively stable survival trend across classes.

   o Passengers aged **19–21 had higher survival rates in first class**, with numbers declining in second and third class.

   o Older passengers' survival increased slightly in third class, but remained lower overall compared to younger groups.

5. **Survival by Passenger Class and Sex**

   o **First-class passengers had the highest survival counts**, with females outnumbering males.

   o Second-class survival was lower, but still showed female passengers surviving at higher rates than males.

   o In third class, survival numbers were much smaller, with males surviving at the lowest rates across all classes.

Conclusion

The analysis reinforces well-documented survival patterns of the Titanic disaster—**gender, age, and socio-economic status (represented by passenger class) were critical factors influencing survival**. Women and children, particularly from higher classes, had the greatest chance of survival, while male third-class passengers had the lowest.

This dashboard provides a clear, visual storytelling tool for exploring historical survival trends, demonstrating the value of data visualization in uncovering meaningful insights from complex datasets.