TITANIC DISASTER ANALYSIS

Comprehensive Exploratory Data Analysis Report

Dataset: 891 passengers, 22 features

Overall Survival Rate: 38.4%

Executive Summary

This comprehensive analysis of the Titanic dataset reveals critical patterns in survival rates based on demographic and socio-economic factors. The overall survival rate was 38.4%, with significant disparities based on gender, passenger class, and age.

Key findings include a 55.3% survival advantage for women, a 38.7% difference between first and third class passengers, and a 54.0% survival rate for children.

The analysis demonstrates clear evidence of the women and children first protocol, while also highlighting the impact of wealth and social status on survival outcomes.

Key Findings

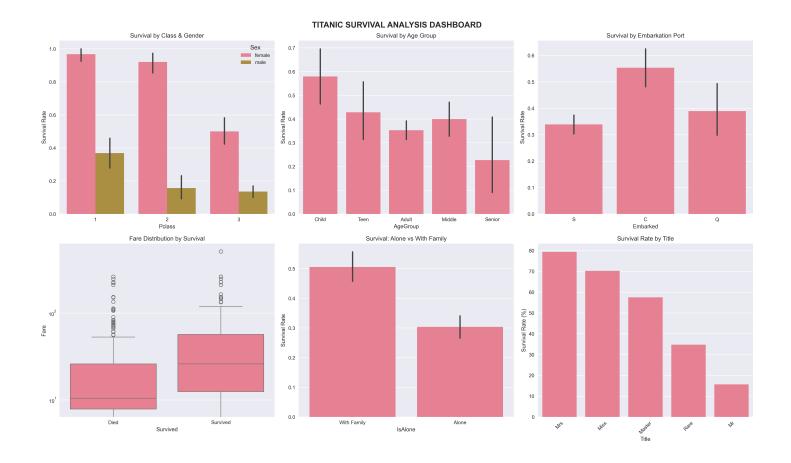
- Gender Disparity: Women had 74.2% survival vs 18.9% for men

- Class Impact: 1st Class: 63.0%, 2nd: 47.3%, 3rd: 24.2%

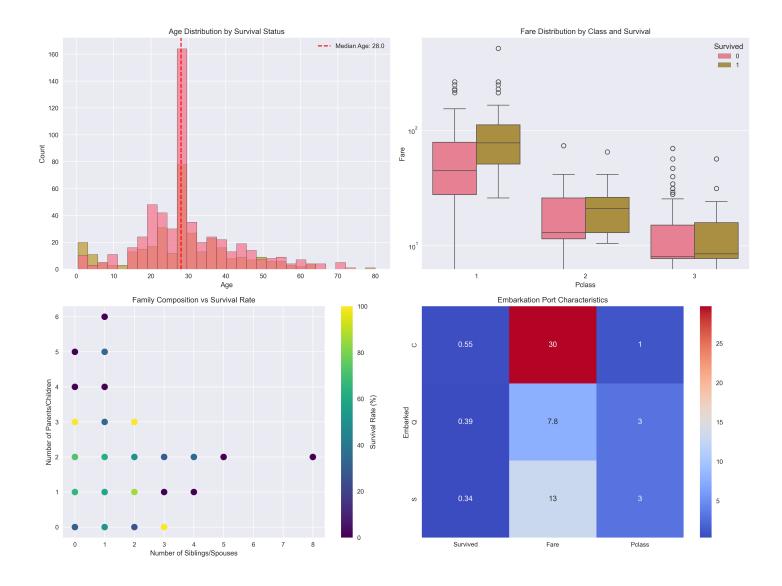
- Age Factors: Children: 54.0%, Elderly: 22.7%

- Family Effect: With family: 50.6%, Alone: 30.4%

Survival Dashboard

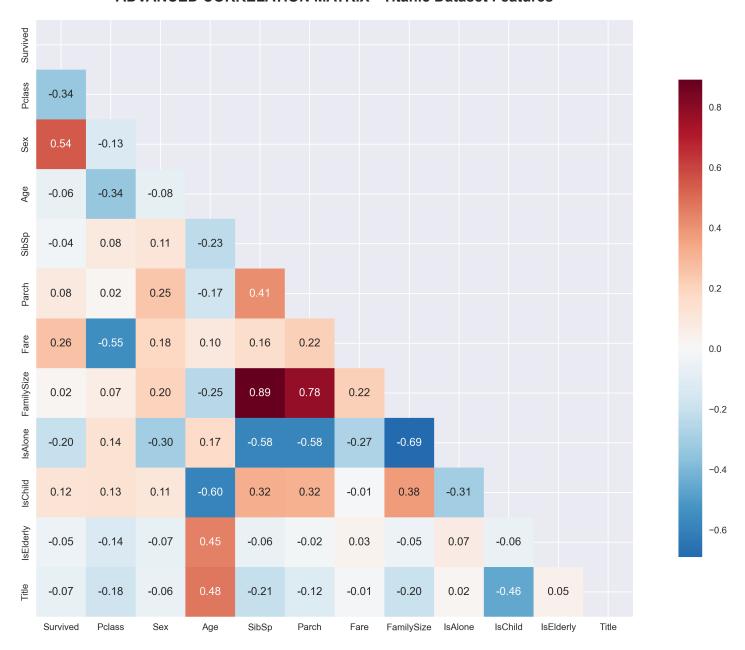


Demographic Analysis



Advanced Correlation

ADVANCED CORRELATION MATRIX - Titanic Dataset Features



Predictive Patterns

