## **TITANIC SURVIVAL ANALYSIS REPORT**

### What Factors Influenced Survival?

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Data Source: Titanic Passenger Dataset

# **Executive Summary**

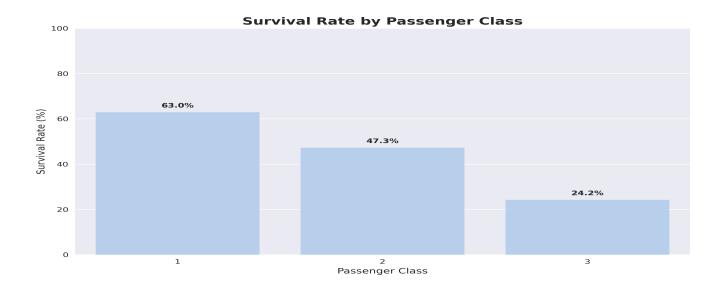
• Analysis of 891 passengers aboard the Titanic

Overall survival rate: 38.4%
Female survival rate: 74.2%
Male survival rate: 18.9%
1st class survival rate: 63.0%
3rd class survival rate: 24.2%
Children survival rate: 54.0%
Average age: 29.4 years
Average fare: \$32.20

#### Key Insights:

- 'Women and children first' protocol was followed
- Higher socioeconomic status improved survival chances
- Traveling with family increased survival probability

# **Survival by Passenger Class**



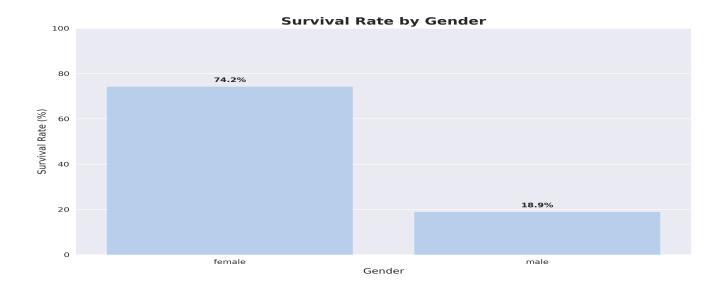
#### Class Analysis:

1st Class: 216 passengers, 63.0% survived
2nd Class: 184 passengers, 47.3% survived
3rd Class: 491 passengers, 24.2% survived

#### Key Finding:

• 1st class passengers had 2.5x higher survival rate than 3rd class

# **Survival by Gender**



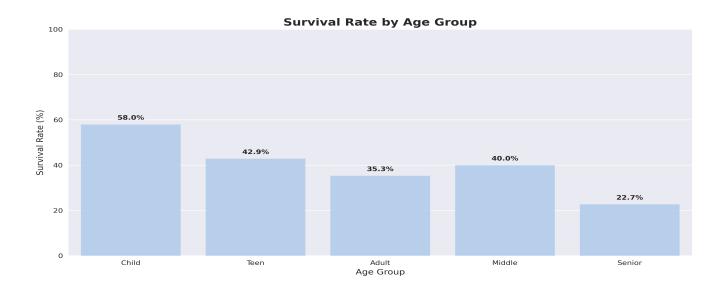
#### Gender Analysis:

Female passengers: 314, 74.2% survivedMale passengers: 577, 18.9% survived

#### Key Finding:

• Women had 3.5x higher survival rate than men

# **Survival by Age Group**



#### Age Analysis:

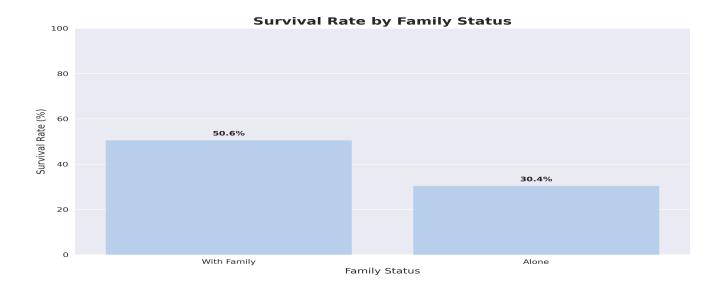
• Children (<18): 113 passengers, 54.0% survived

• Average age: 29.4 years

#### Key Finding:

• The 'children first' protocol was followed

# **Survival by Family Status**



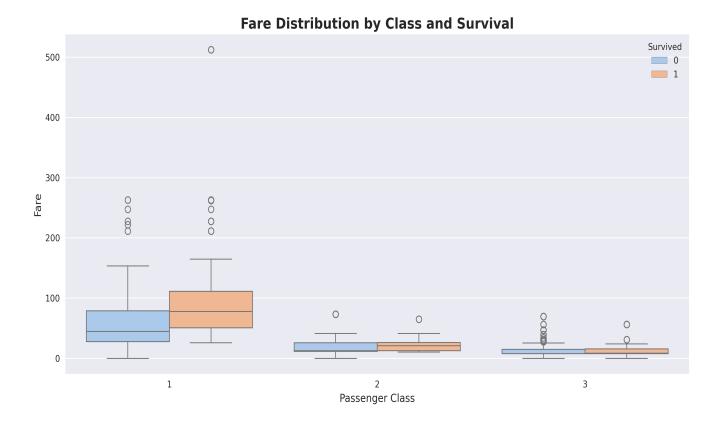
#### Family Analysis:

Key Finding:

Passengers traveling alone: 537, 30.4% survived
Passengers with family: 354, 50.6% survived

• Traveling with family increased survival chances

# **Fare Distribution by Class and Survival**



### Fare Analysis:

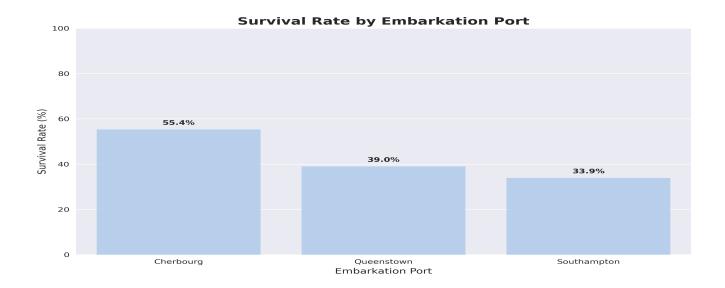
• Average fare: \$32.20

# **Continued Analysis**



• Higher fares (correlated with higher class) were associated with better survival rates

# **Survival by Embarkation Port**



#### **Embarkation Analysis:**

Cherbourg: 168 passengers, 55.4% survived
Queenstown: 77 passengers, 39.0% survived
Southampton: 646 passengers, 33.9% survived

#### Key Finding:

• Passengers from Cherbourg had higher survival rates

# **Conclusion & Key Takeaways**

The Titanic disaster revealed significant patterns in survival:

#### 1. SOCIOECONOMIC FACTORS:

- Higher class passengers had significantly better survival rates
- Wealth and status provided access to better locations on the ship

#### 2. GENDER AND AGE PRIORITIES:

- The 'women and children first' protocol was largely followed
- Female survival rate was 3.5x higher than male survival rate

#### 3. FAMILY SUPPORT:

- Traveling with family members increased survival chances
- Alone passengers had lower survival rates

#### 4. HISTORICAL CONTEXT:

- These patterns reflect early 20th century social norms and values
- The disaster led to improved maritime safety regulations