```
--- Data Preparation & Consolidation ---

1. Initial Consolidated Dataset (with iss
    Feature_A  Feature_B  Target_Class
0        10.0       20.5             0
1        12.0       24.1             1
2        10.0       20.5             0
3        15.0        NaN             1
4        11.0       22.0             0
5        18.0       30.2             1
6        15.0       28.5             1
7        11.0       22.0             0
8        20.0       35.0             0
9        13.0       25.5             1
10        NaN       27.0             1

---
Duplicates removed. 2 rows were dropped.
---
Missing values before:
 Feature_A       1
Feature_B       1
Target_Class    0
dtype: int64

Missing values addressed by filling with
Missing values after:
 Feature_A       0
Feature_B       0
Target_Class    0
dtype: int64
---

2. Cleaned and Structured Dataset:
    Feature_A  Feature_B  Target_Class
0       10.00       20.5             0
1       12.00       24.1             1
3       15.00       26.6             1
4       11.00       22.0             0
5       18.00       30.2             1
6       15.00       28.5             1
```

```
6       15.00       28.5              1
8       20.00       35.0              0
9       13.00       25.5              1
10      14.25       27.0              1
========================================

--- Neural Network Modelling ---

3. Model Parameters: {'hidden_layer_sizes
/tmp/ipython-input-514419638.py:49: Futur
The behavior will change in pandas 3.0. T

For example, when doing 'df[col].method(v


  df[col].fillna(df[col].mean(), inplace=

Neural Network Model training complete.
---

4. Forecasts (Predictions on Test Data):
   Actual  Predicted  Probability_Class_1
9       1          1                0.679
1       1          0                0.067
6       1          1                0.979
---

5. Model Results and Performance:
Accuracy Score: 0.6667

Classification Report (Key Insights):
              precision    recall  f1-sco

           0       0.00      0.00      0.
           1       1.00      0.67      0.

    accuracy                           0.
   macro avg       0.50      0.33      0.
weighted avg       1.00      0.67      0.


Actionable Insight/Summary: The current m
```