

# Data Pipeline Report

File: churn.csv | Timestamp: 2025-08-23T14:39:18.612147

## 1. Data Validation Summary

Total Rows	100
Total Columns	14
Missing Values Found	0
Duplicate Rows Found	0

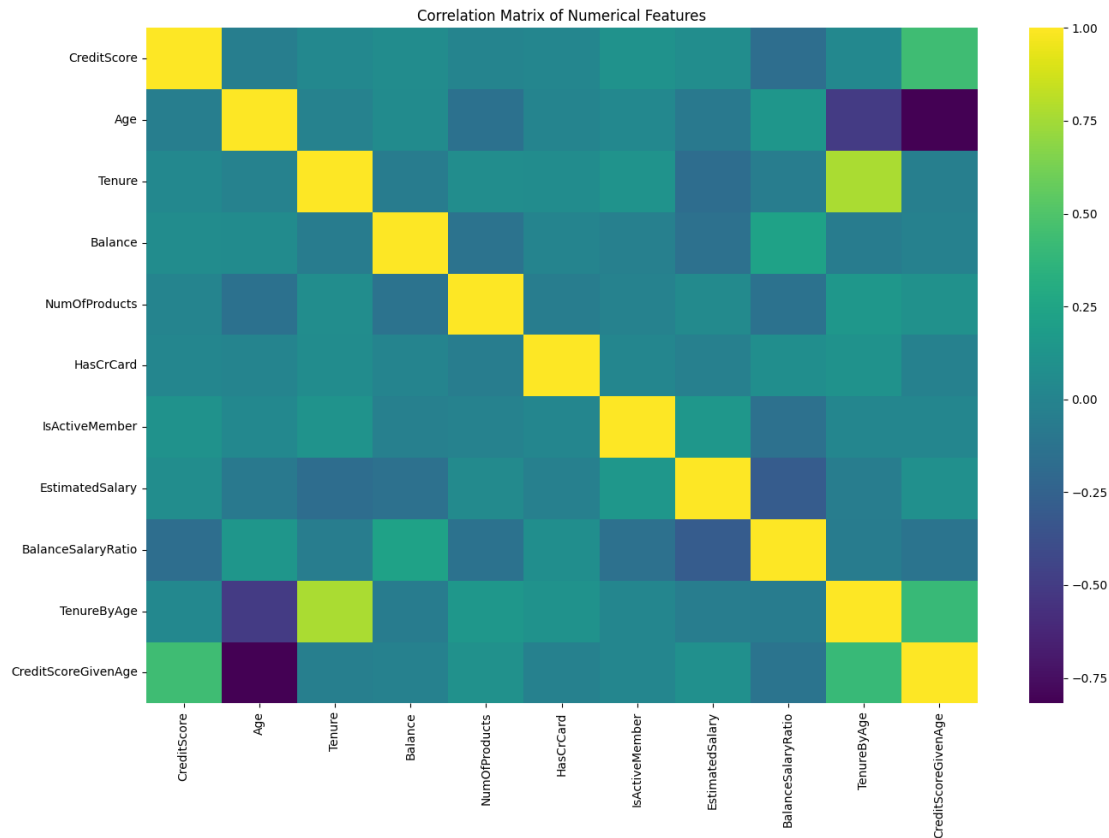
## 2. Feature Engineering Summary

**Columns Dropped:** RowNumber, CustomerId, Surname

**Columns Created:** BalanceSalaryRatio, TenureByAge, CreditScoreGivenAge

## 3. Exploratory Data Analysis

*Correlation Heatmap*



## 4. Final Processed Data

Shape of Final DataFrame: (100, 15)

**Processed DataFrame Head:**

CreditScore	Age	Tenure	Balance	NumOfProducts	HasCrCard	IsActiveMember
-0.83	-0.71	1.49	-1.23	-0.17	-1.02	-1.08
-0.1	-1.56	0.08	-0.38	1.04	0.98	-1.08
-1.27	0.24	0.08	-0.11	1.04	-1.02	-1.08
0.16	-1.7	-0.27	1.29	1.04	0.98	-1.08
1.63	0.72	1.49	-1.36	-0.17	0.98	0.92