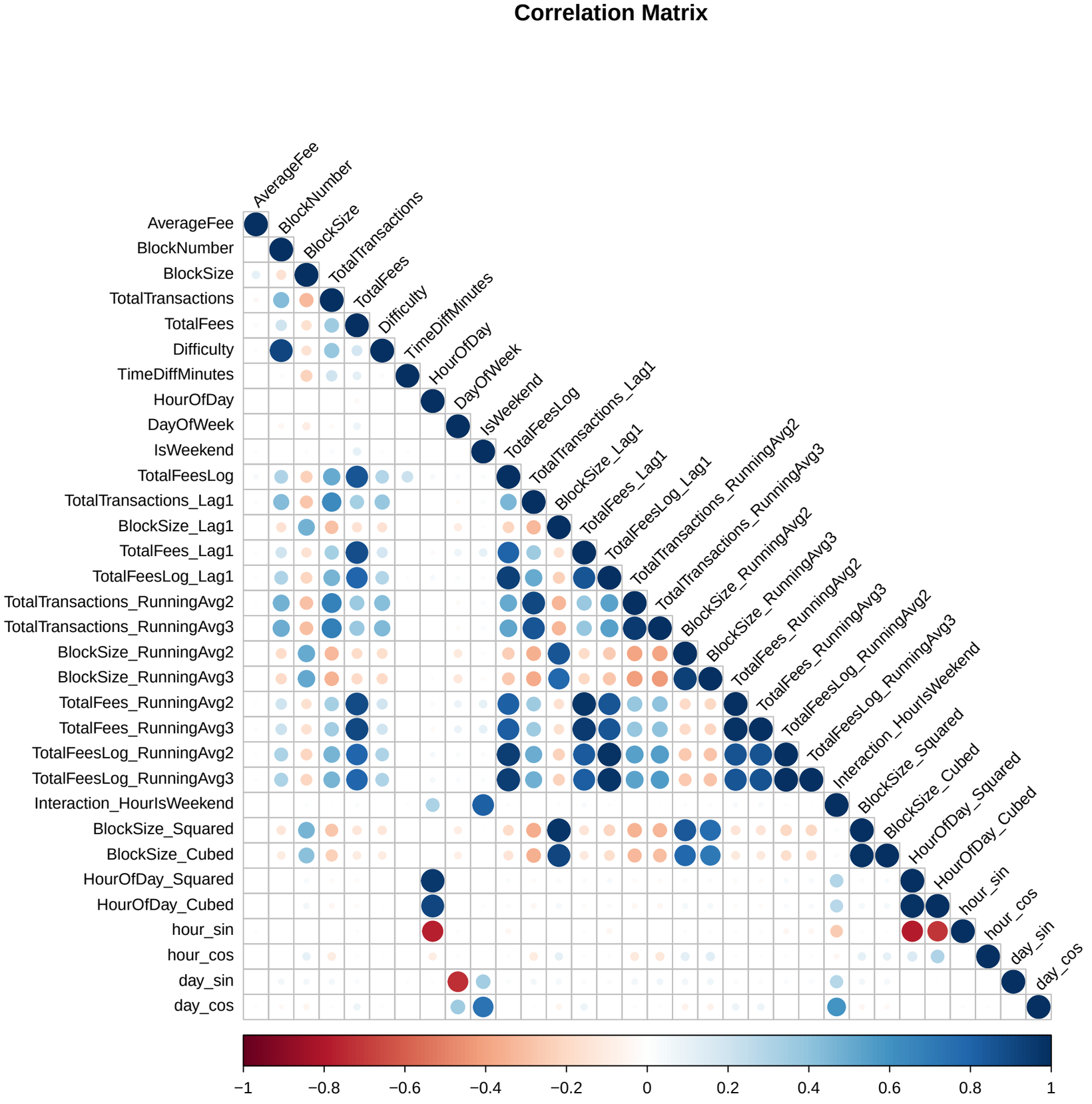
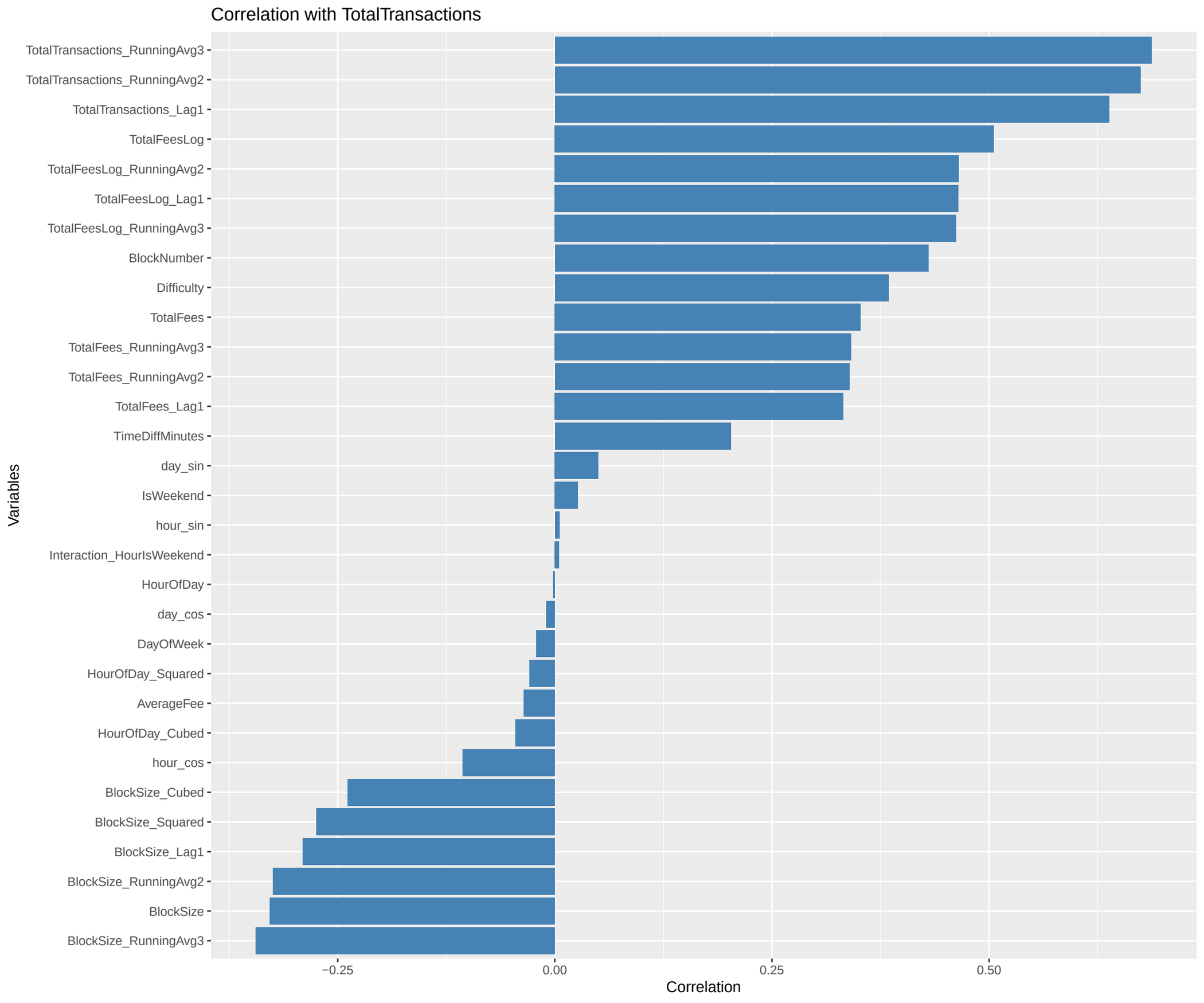

Correlation Matrix
AverageFee
BlockNumber
BlockSize
TotalTransactions
TotalFees
Difficulty
TimeDiffMinutes
HourOfDay
DayOfWeek
IsWeekend
TotalFeesLog
TotalTransactions_Lag1
BlockSize_Lag1
TotalFees_Lag1
TotalFeesLog_Lag1
TotalTransactions_RunningAvg2
TotalTransactions_RunningAvg3
BlockSize_RunningAvg2
BlockSize_RunningAvg3
TotalFees_RunningAvg2
TotalFees_RunningAvg3
TotalFeesLog_RunningAvg2
TotalFeesLog_RunningAvg3
Interaction_HourIsWeekend
BlockSize_Squared
BlockSize_Cubed
HourOfDay_Squared
HourOfDay_Cubed
hour_sin
hour_cos
day_sin
day_cos
−1
−0.8
−0.6
−0.4
−0.2
0
0.2
0.4
0.6
0.8
1


Correlation with TotalTransactions
TotalTransactions_RunningAvg3
TotalTransactions_RunningAvg2
TotalTransactions_Lag1
TotalFeesLog
TotalFeesLog_RunningAvg2
TotalFeesLog_Lag1
TotalFeesLog_RunningAvg3
BlockNumber
Difficulty
TotalFees
TotalFees_RunningAvg3
TotalFees_RunningAvg2
TotalFees_Lag1
TimeDiffMinutes
day_sin
IsWeekend
hour_sin
Interaction_HourIsWeekend
HourOfDay
day_cos
DayOfWeek
HourOfDay_Squared
AverageFee
HourOfDay_Cubed
hour_cos
BlockSize_Cubed
BlockSize_Squared
BlockSize_Lag1
BlockSize_RunningAvg2
BlockSize
BlockSize_RunningAvg3
Variables
−0.25
0.00
0.25
0.50
Correlation

PCA Summary

Importance of components:

	PC1	PC2	PC3	PC4	PC5	PC6	PC7
Standard deviation	3.1006	2.0770	1.9287	1.58350	1.54619	1.31495	1.10778
Proportion of Variance	0.3004	0.1348	0.1162	0.07836	0.07471	0.05403	0.03835
Cumulative Proportion	0.3004	0.4352	0.5515	0.62983	0.70454	0.75858	0.79693

	PC8	PC9	PC10	PC11	PC12	PC13	PC14
Standard deviation	1.09083	1.00428	0.98486	0.77337	0.64763	0.62841	0.61310
Proportion of Variance	0.03718	0.03152	0.03031	0.01869	0.01311	0.01234	0.01175
Cumulative Proportion	0.83411	0.86563	0.89594	0.91463	0.92774	0.94008	0.95183

	PC15	PC16	PC17	PC18	PC19	PC20	PC21
Standard deviation	0.57053	0.53316	0.42962	0.38958	0.37723	0.32703	0.2830
Proportion of Variance	0.01017	0.00888	0.00577	0.00474	0.00445	0.00334	0.0025
Cumulative Proportion	0.96200	0.97088	0.97665	0.98139	0.98584	0.98918	0.9917

	PC22	PC23	PC24	PC25	PC26	PC27	PC28
Standard deviation	0.26903	0.24149	0.23050	0.18193	0.13932	0.10590	0.09701
Proportion of Variance	0.00226	0.00182	0.00166	0.00103	0.00061	0.00035	0.00029
Cumulative Proportion	0.99395	0.99577	0.99743	0.99846	0.99907	0.99942	0.99971

	PC29	PC30	PC31	PC32
Standard deviation	0.07505	0.04353	0.03961	0.00528
Proportion of Variance	0.00018	0.00006	0.00005	0.00000
Cumulative Proportion	0.99989	0.99995	1.00000	1.00000

Decision Suggestions

Decision Suggestions based on Correlation Analysis

1. **Features with High Correlation**:
Consider using the following features in your model as they show a significant correlation with the target variable:
- TotalTransactions_RunningAvg3
- TotalTransactions_RunningAvg2
- TotalTransactions_Lag1
- TotalFeesLog
- TotalFeesLog_RunningAvg2
- TotalFeesLog_Lag1
- TotalFeesLog_RunningAvg3
- BlockNumber
- Difficulty
- TotalFees
- TotalFees_RunningAvg3
- TotalFees_RunningAvg2
- TotalFees_Lag1
- BlockSize_RunningAvg2
- BlockSize
- BlockSize_RunningAvg3

2. **Features with Moderate Correlation**:
Consider using the following features with caution, as they show moderate correlation with the target variable:
- TimeDiffMinutes
- hour_cos
- BlockSize_Cubed
- BlockSize_Squared
- BlockSize_Lag1

Decision Suggestions based on PCA Analysis

3. **Principal Components**:
Consider the principal components that explain the majority of the variance. Use these components to reduce dimensionality if needed.