Tasks 5: Advanced Analysis

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Grouped Statistics by Tenure Bucket:
  tenure_bucket  customers  avg_monthly_charges  median_total_charges  \
0          0-12       2186             56.097781               174.550
1         13-36       1856             63.248195              1404.975
2           37+       3001             72.008730              4282.400

   churn_rate
0    0.474382
1    0.255388
2    0.119294

File saved as: 'group_stats_by_tenure.csv'

 Churn Rate by gender:
   gender  churn_rate
0  Female    0.269209
1    Male    0.261603

 Churn Rate by seniorcitizen:
   seniorcitizen  churn_rate
0              0    0.236062
1              1    0.416813

 Churn Rate by paymentmethod:
            paymentmethod  churn_rate
0  Bank transfer (automatic)    0.167098
1    Credit card (automatic)    0.152431
2           Electronic check    0.452854
3              Mailed check    0.191067

 Churn Rate by contract:
         contract  churn_rate
0  Month-to-month    0.427097
1        One year    0.112695
2        Two year    0.028319
```