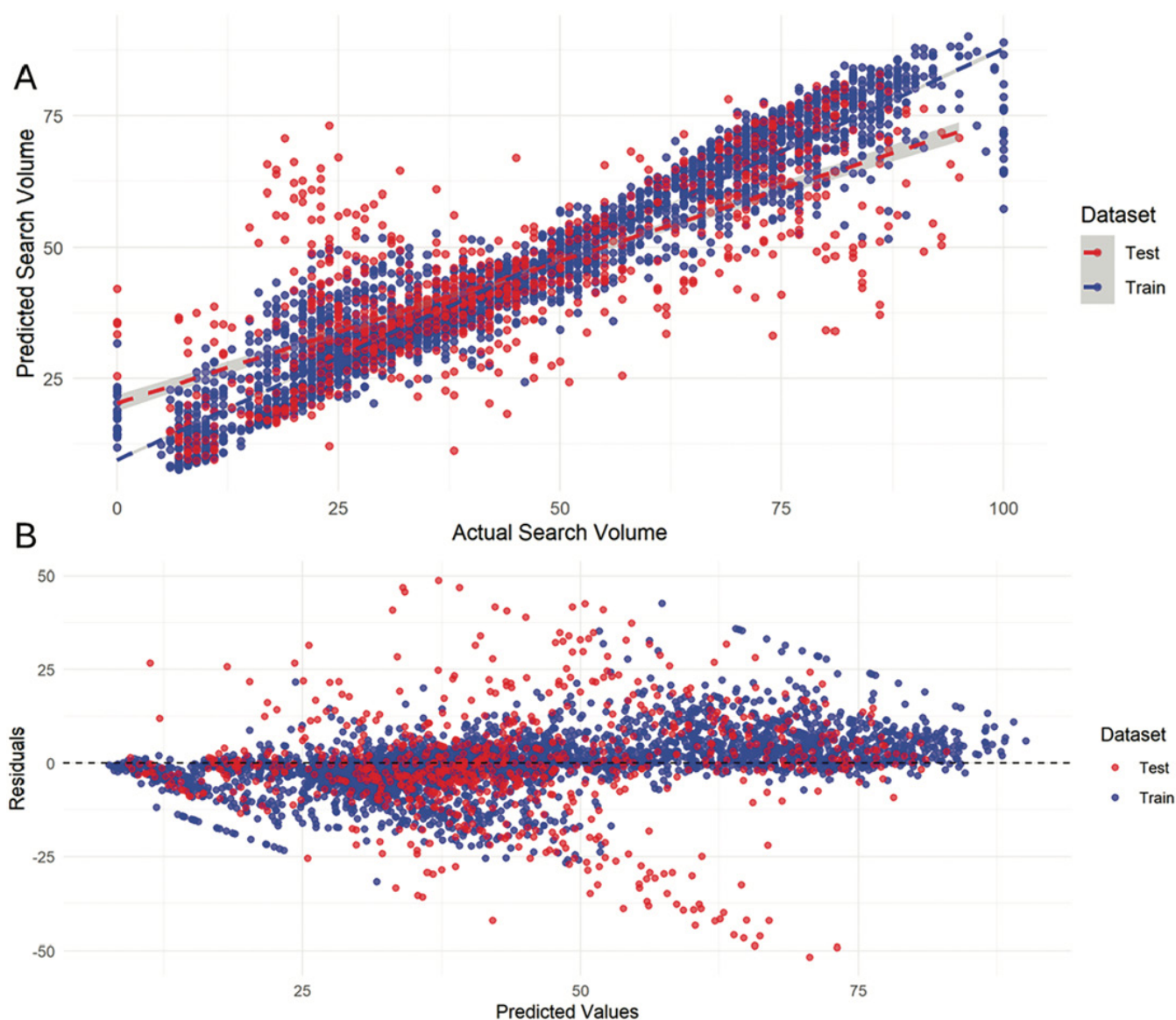


Supplementary Fig. S1. Time series decomposition analysis of FM search volumes across each of the 16 analysed countries. Each panel represents a country and displays the observed search trend, seasonal patterns, and residual components over the study period (2020–2024), highlighting temporal fluctuations and periodic variations in online interest.



Supplementary Fig. S2. Graphical evaluation of the predictive performance of the RF model. (A) Comparison of actual versus predicted search volumes for both training (blue) and test (red) datasets, demonstrating strong agreement in the training set while revealing wider dispersion in the test set, suggesting a reduction in generalisation accuracy. (B) Residual plot illustrating the distribution of errors for predicted values. Residuals are centred around zero, indicating no significant bias, but a slight heteroscedasticity effect is observed, particularly at higher predicted values.