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**COMPARISON OF TIME SERIES MODELS TO FORECAST TOURIST ARRIVALS IN SRI LANKA**

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Tourism is one of the main industries, which shows the rapid growth of the economy of Sri Lanka. It strongly depends on the arrival of different groups of tourists. The forecast of tourist arrival is important, as it will allow the tourism related sectors to adequately prepare for any number of tourists at any future period. The purpose of this study is to investigate and forecast the tourist's arrival in Sri Lanka based on data from 1975 to 2016. The tourists' arrivals data follow univariate time series, the double exponential smoothing techniques and autoregressive integrated moving average (ARIMA) models, are used in forecasting. The model selection is done based on Bayesian information criterion (BIC) and mean absolute percentage error (MAPE) used for measuring the performance of selected models. Among the used time series models, ARIMA (1,1,0) is identified as the best model to forecast the future values of tourist arrivals in Sri Lanka.

**Keywords:** *ARIMA, BIC, Exponential smoothing, MAPE.*