

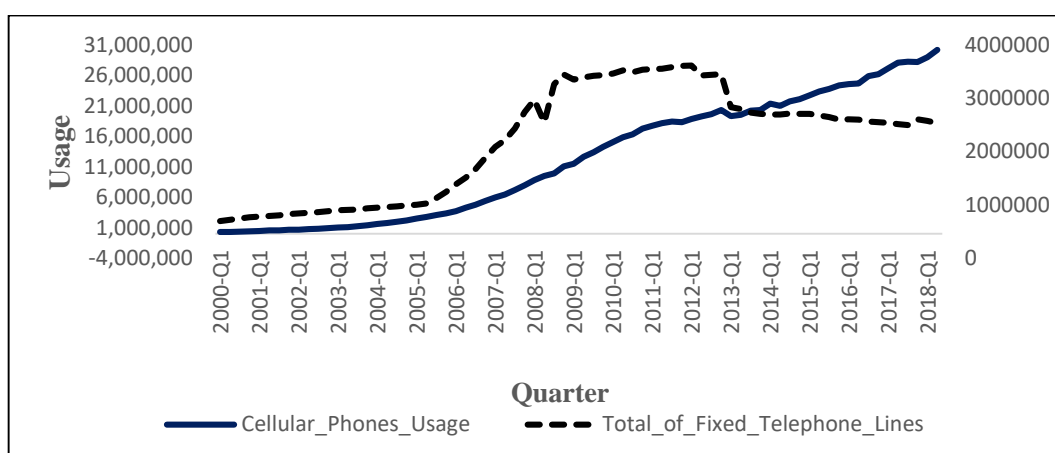
Modeling and Forecasting the Usage of Cellular and Landline Phones in Sri Lanka

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Introduction

Cellular and landline phones are at the forefront of telecommunication. There are two major categories of phones namely cellular phones and landline phones. Landline phones can be classified into another two sub categories as fixed wire landline phone and fixed wireless landline phones. In this study, the total usage of those two categories have considered as the landline phone usage. Since, the mobile segment has instantly developed in Sri Lanka, there can be seen a significant decline in landline phones market.

Figure 1: Time Series Plot of Cellular and Fixed Telephone Lines Usage in Sri Lanka



Source: Central Bank, Sri Lanka (2018)

In this paper a thorough statistical analysis has been undertaken to forecast the usage of both cellular and fixed landlines in Sri Lanka. Here, time series analysis (Hillmer & Wei, 1991) and forecasting (Robert & David, 1964) were aid in modeling the usage. (Yuan et al., 2004) have conducted a survey to analyze the households on cell phones using several survey techniques. It was hard to find proper literatures on forecasting the usage of phones using time series which have done for Sri Lanka. Nevertheless, (Kaur & Abodallahian, 2014) has carried out a study to examine the future Global Mobile market using Holt's Exponential Smoothing method to forecast the monthly mobile data.

Our study will be helpful to the people those who are with the telecoms market to achieve their business goals.

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