

## A SUGGESTED STATISTICAL MODEL TO MEASURE THE PERFORMANCE QUALITY OF E-SERVICE-FIFA2010

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Received November 20, 2017

## Abstract

Based on a group of variables obtained from actual hourly observations of visiting the website of football world cup 2010 during thirty days (the period of the competition), this paper suggested a statistical model to measure the performance quality of E-service-FIFA2010. The dependent variable was response time in seconds and the independent variables were type of connection machine (Smart phones, I-pad, I-phones, Tablets, Laptop, desktop), Time of access, Duration of logging, Distances between countries and the country of champion, Classification of teams. Simple Exponential Smoothing method (SES), Holt's method (HM), Holt-Winters' method (HWM) were used. The results showed that the (SES) method was the best method to measure the performance of quality of E-service and that performance was influenced by the distance between the countries and the host country. Minitab and SPSS were used to calculate the results in this study.

**Keywords and phrases:** time series analysis, smoothing techniques (SES, HM, HWM), detectable and visible smoothing ( $\alpha$ ).



ISSN: 2230-9837