PREDICTIVE MODEL TO MEASURE IT EMPLOYEE SATISFACTION BASED ON WFH CULTURE IN SRI LANKA

Wimali Athulathmudali

A dissertation submitted in partial fulfilment of the requirement for the degree of MSc Big Data Analytics

Department of Computing

Informatics Institute of Technology, Sri Lanka in collaboration with University of Robert Gordon University Aberdeen, Scotland

2022

Abstract

The recent COVID-19 pandemic impacted many office cultures all over the world. The IT industry, more than any other, adapted quickly to the new remote working culture. Many researchers believe that these shifts toward remote work will be permanent. However, most were unfamiliar with the concept in Sri Lanka, and the country was not prepared to legally, economically, or technologically enable employees to work from home. When employees cannot work comfortably, it leads to dissatisfaction, affecting employee productivity in the long run. As a result, this research aims to identify potential factors and develop a model to measure IT employee satisfaction based on WFH culture in Sri Lanka.

After conducting a thorough literature review and an initial survey, potential factors influencing the satisfaction of IT employees who work from home were classified based on several categories, including employee characteristics, workplace, working practices, and family background. Based on the findings, prepared an online questionnaire to collect data, and 189 people responded. In this research study, the classification models which are Random Forest, Logistic Regression, Support Vector Machine, and XGBoost Classifier were selected and tested the performance in predicting employee satisfaction. During the evaluation the SVM classification model was chosen as it outperformed the other models with an accuracy of approximately 82%.

Keywords: WFH, SVM, satisfaction prediction model , Flask, IT Employee Satisfaction, REST API